PREVENTION: ALCOHOL AND THE ENVIRONMENT

Issues, Constituencies, and Strategies

Papers and reports from a symposium
held in Toronto, Canada
March 18–19, 1985

EDITORS
NORMAN GIESBRECHT
AND
ANNE COX

ADDICTION RESEARCH FOUNDATION

PREVENTION: ALCOHOL AND THE ENVIRONMENT

Issues, Constituencies and Strategies

Norman Giesbrecht

Ann E. Cox

Editors

Addiction Research Foundation
Toronto, Ontario
1986

Canadian Cataloguing in Publication Data

Addiction Research Foundation of Ontario
Prevention: alcohol and the environment:
issues, constituencies, and strategies

Papers presented at a symposium held in Toronto,
March 18-19, 1985.
Includes bibliographical references
ISBN 0-88868-141-0

1. Alcoholism - Prevention - Congresses.
2. Alcoholics - Government policy - Congresses.
I. Giesbrecht, Norman. II. Cox, Ann E.
III. Addiction Research Foundation (Ont).

HV5047.P73 1986 362.2'9286 C86-094613-4

CONTENTS

DEVELOPING AND DOCUMENTING INTERVENTIONS

MUNICIPAL AND REGULATORY INTERVENTIONS

WORKSHOPS: DISCUSSION SUMMARIES

APPENDICES

PREFACE

The papers gathered here were delivered at a symposium held in Toronto in March 1985 to discuss the application of research in developing strategies and policies to reduce or prevent alcohol problems.

The idea for such a meeting came about because we believed it would be fruitful for those working at the interface between community program development and alcohol problem prevention research to talk directly to each other about their concerns and findings, and so deal with issues immediately affecting us all. Seldom do alcohol researchers and community programmers meet in a context where an intensive exchange on common concerns and interests is encouraged. The participants at the symposium welcomed this novel opportunity and hoped that it would not be the last.

Practitioners and researchers alike agree that there are difficulties in collaborating on field projects because of naturally occuring differential demands to accomplish high quality work in their respective domains. Nevertheless there exists a mutual need for a sufficiently reliable data base on which to build effective programs, no less so than in this relatively new field of community alcohol problem prevention.

So while there are difficulties in combining field work and research, the participants, through their papers gathered here, also illuminate the common ground from their various perspectives. They address current issues in community-based program planning and in building local support for community alcohol problem prevention. They examine environmental or public policy issues which must be addressed as part of prevention efforts at the local level. And, above all, they ratify the need to link research and community program development effectively if we are to understand how we must proceed.

The summaries of the four workshops provide background colour and context for the papers, and reflect the participants' ideas and experiences. It is evident that the frequent lack of formal mechanisms to ensure the program/research link means that many programs go unevaluated and often unreported. Researchers may be brought into the picture too late or not at all. It is also evident that community program credibility (with funders and policy makers) is contingent on sound program evaluation.

The papers and workshop summaries provide the perspectives and findings of researchers and programmers from a wide range of institutions. The material is current; it summarizes work that has just been completed, or is still underway, and points to new initiatives. This collection is North American in scope, and wide ranging in program application, and will be of interest to both community program developers and proram researchers in this rapidly growing field.

Norman Giesbrecht
Ann E. Cox

ACKNOWLEDGEMENTS

We wish to thank the participants of the symposium for their thoughtful contributions.

Financial support from the Community Services Division and the Social and Biological Studies Division, Addiction Research Foundation, made it possible to hold the meeting and prepare this report. William J. Gilliland,Special Projects Officer in the Education Resources Division of the Foundation contributed to the meeting and preparation of this report. Nancy Fawcett edited the summaries of the workshops.

Above all we thank Linda Vandenakker. Her precision and attention to detail saw us through all the stages of collation, transcription and correction of the final manuscript.

GENERAL PERSPECTIVES

HEALTH PROMOTION: THE RELEVANCE OF POLICY AND EDUCATIONAL COMPONENTS

Robert Simpson
Executive Director
Wellington-Dufferin District Health Council
Guelph, Ontario

INTRODUCTION

As part of the background briefing for this presentation, I was told to imagine a fertile field that was untouched in its natural splendour, and that I was the first person to arrive on the scene with a plough. This imagery was stretched to suggest that if I did my job well, we would end up with a bountiful crop at the conclusion of the symposium. Otherwise, it would be just another year of sparse pickings. Needless to say, it is with some trepidation that I stand before you with this formidable responsibility on my shoulders.

As I have understood the topic, it is to focus on the definition of health promotion in the broadest sense, paying special attention to the role of both policy and educational strategies. Defining health promotion is a sensitive topic, for a number of reasons. I know, for example, that at the mention of the words "health promotion" the thoughts of most people will instantly head off in a variety of separate and often conflicting directions. Health theorists have been arguing about the precise nature of health promotion for a long time now. From my perspective, their major accomplishment has been only to fragment the field. What we really need, as health promotion programmers and researchers, are models that integrate and interrelate our efforts. We do not need models which further polarize us to isolated and competing factions. It is to the task of describing an integrative model that I would like to direct my presentation today.

Within this integrative approach, I would very much like to dispel the notion that policy and educational approaches to health promotion are somehow mutually exclusive and, even worse, in competition. Increasingly, I am hearing people say things like, "Education does not work -- if you want to get anywhere in your health promotion efforts, you must use policy-based approaches." To me, this kind of split hurts the entire field. We would be much better advised to systematically explore the potential for educational and policy-based interventions, and to delineate the most effective applications for each, both separately and in conjunction with each other. Especially, I would contend, if we would like to maximize our impact.

THE WELL-ILL CONTINUUM

Let me now turn to a description of the integrative approach to which I have been referring. It begins with a conceptual tool known as the Well-Ill Continuum (Figure 1).

The Continuum describes a range of six categories of health status in a population. The concept is not new -- in fact, I know of variations that date back as early as 1948. This particular version is a refinement of the one described by Hamilton (1981).

The Continuum divides the general population into health categories, each of which is conceptually linked to a separate grade of health status, and each of which lends itself to the development of discrete program strategies. Of course, these divisions are conceptual, and reflect neither the way people actually move from one category to another, nor the blending that occurs between categories. While I am acknowledging limitations, I should add that some theorists argue that additional dimensions are needed to differentiate, for example, between "wellness" and "good health" or between "illness" and "disease". Despite these disputable shortcomings, I am convinced that the continuum best fills our requirements from the perspective of program planning and development. I trust you will agree that the case in support of this position becomes stronger as we go along.

The first thing to notice on the Continuum is the line that separates the three categories in the "well" population from the three in the "ill" population. Again, this is a conceptual transition point. It represents what is often referred to as the "biological onset" of disease or disability -- the point at which something is wrong biologically and is detectable (White, 1984). Often, there is a time lag between the "biological onset" and what is called the "clinical onset", when people actually go for help. To try and narrow this gap, we have case finding and screening programs. But I am digressing here, and will not elaborate further.

On the right side of the Continuum, we have the three health status categories which are associated with the "ill" population. The first is known as Signs and Symptoms. Essentially, this category includes the initial manifestations of disease or disability -- either an antecedent condition or a mild case. Programs which intervene at this stage are referred to as "Early Intervention", and often include the case finding and screening functions that I mentioned a moment ago.

To continue this conceptual progression, it can be anticipated that if we miss people at the Signs and Symptoms stage, the problem will likely

FIGURE 1

The Well-Ill Continuum

WELL			ILL		
Optimal Health	Healthy/ Low Risk	At Risk	Signs & Symptoms	Disease or Disability	Death

continue along its natural history, and move to the Disease and Disability category. From the health promotion perspective, it is this category that specifically describes what it is we would like to prevent. In this context, I suggest that it is essential for us to clearly identify the range of diseases and disabilities that concern us, as a preliminary step in our function as health promotion programmers or researchers. This step, in effect, defines for us the target condition that we ultimately wish to affect. Once this has been done, our program development energies turn to the question of how these target conditions can be prevented. I will be speaking about this more when we examine the left-hand side of the Continuum.

Finally, on the "ill" side, we have the category labelled Death or Premature Mortality. In Canada, the average male life expectancy is 72 years, while the average female is 78 years (Wilkins and Adams, 1982). There is a belief among health researchers that the human body is designed to last an average of 85 years (Fries, 1980). Premature mortality, then, can be envisioned as dying either before the current average age for each sex, or before the potential average of 85 years.

These last two categories can be integrated into a concept known as the "compression of morbidity" (Fries, 1980). Here the goals are to simultaneously push the mortality rate toward 85 years, and to reduce the lifelong proportion of diseased and disabled days as much as possible. In so doing, it is suggested that "quality of life" is being addressed in two fundamental ways. Pushed to its hyperbolic limit, this concept paints the ideal scene for the morning of our 86th birthday: we would awaken, feeling a bit peaky for the first time in our lives, and have expired by noon, having lead a full and illness-free existence.

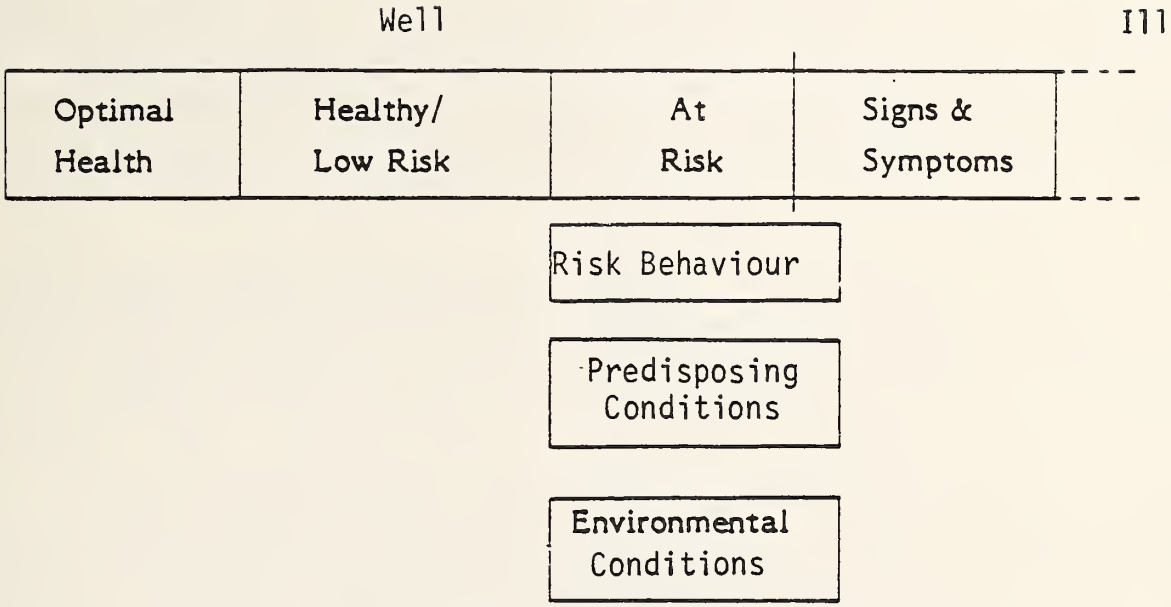
Moving now to the "Well" side of the Continuum, we encounter At Risk status immediately before the "biologic onset", or area of transition to disease or disability. In this model, risk status is conferred if a known cause or predictor for the target condition (disease or disability) is present (Figure 2).

There are three principal criteria by which risk is defined. The first is behaviour. Adopting certain behaviours (and smoking is a classic example) will tend to place people at a higher rate for various illnesses than will avoiding these behaviours.

The second criterion is environmental conditions. By virtue of being in certain environments, people may face the increased risk of health problems. This can occur in a direct fashion, as with contaminated water and air, or in an indirect fashion, whereby environmental conditions

FIGURE 2

Criteria for Risk Status



facilitate or encourage the adoption of risk behaviours. The control measures that govern the sale of alcohol are examples of indirect environmental conditions; they serve to impede the adoption of certain "risk drinking" behaviours.

The third criterion by which risk status is conferred is a bit of a catch-all known as "predisposing conditions". It includes biological functions such as the body's ability to resist illness through naturally acquired or induced immunity. This criterion also includes a variety of inherited or cultural characteristics that tend to place people at risk. For example, it is generally agreed that the children of alcoholics are themselves at increased risk for alcohol problems later in life. On another front, the Black Report from England documents trends in illness by social class, by sex, and by age, all of which can be considered "predisposing conditions" that place populations at risk (Townshend and Davidson, 1982).

The next category of health status, moving to the left, is the Low Risk group. One way of describing this category is the residual approach; if you are "well" and not in an "at risk" group for the target disease or disability, then you will likely fall into the low risk category. This approach suggests that there is no known or identifiable correlate for the target illness or condition among low risk people. This is not to say that they will not experience disease or disability, but rather that their rate of incidence will be lower than for identifiable "at risk" groups.

So far, the orientation in this model has been toward the prevention of illness, on the assumption that a substantial part of good health or "wellness" involves the absence of illness. Health theorists will not hesitate to point out, however, that being free from illness (and risk status) is not necessarily the same as being healthy. Furthermore, they agree that the absence of illness does not speak to the concept of optimizing one's good health. Personally, I am not overly swayed by these distinctions. I tend to see little difference between those activities which move you toward a state of optimal health and those which move you away from risk status. Nevertheless, the model includes an "Optimal Health" category on the far left. Accordingly, it recognizes that there are certain activities which are intended to move people from being merely at low risk of disease or disability toward some state of ideal health. This position is perhaps best exemplified in Ardell's concept of "high level wellness" (Ardell, 1978).

HEALTH CARE RESPONSES

Now, if we adopt a view of the complete Continuum, we can see that the health care system is organized to respond to each category of health status in different ways (Figure 3). Interventions aimed at the "disease and disability" category (and, by implication, reducing premature mortality) are grouped together under the concept of tertiary prevention. Their overall purpose is to treat and to rehabilitate, thereby returning people to "well" status, to whatever extent possible.

Another set of interventions endeavours to identify illness prior to the normal clinical presentation, and to restore health before fully mature disease or disability is experienced. As mentioned earlier, these are often referred to as Early Intervention programs. Others yet focus on the "at risk" population and endeavour to introduce change before the biologic onset of illness occurs. These are grouped into what I like to term Risk Reduction programs. Generally, Early Intervention and Risk Reduction programs are collectively described under the heading of secondary prevention. This synthesis is a sensible one if you consider how gradual the transition actually is from risk status to exhibiting signs and symptoms, and how difficult it is to detect the actual biologic onset of disease. Although the concepts are conceptually clear, and help us delineate our program responses, they are not discrete in clinical reality.

Another set of interventions is aimed at low risk populations and, in effect, endeavours to reduce the incidence of risk status. These interventions are predicated on the assumption that there is a steady flow of people from the low risk to the risk category, and that this rate can be influenced. I will refer to these interventions as Risk Avoidance programs.

Finally, we have interventions which are intended to move people toward optimal health. As a group, we can refer to these as Health Enhancement programs. Often, these two types of programs, Risk Avoidance and Health Enhancement, will be combined and referred to as primary prevention.

There is one further way of looking at the Well-Ill Continuum, and that is in relation to the typical structure of our health care systems (Figure 4). Under this analysis, we have the traditional treatment and rehabilitation services which are essentially reactive and geared to respond after the biologic onset of illness has occurred. Hence they incorporate Early Intervention and tertiary prevention programs, and focus on the "Ill" population. On the other side, we have the emerging set of

FIGURE 3

Health Care Responses According to Health Status

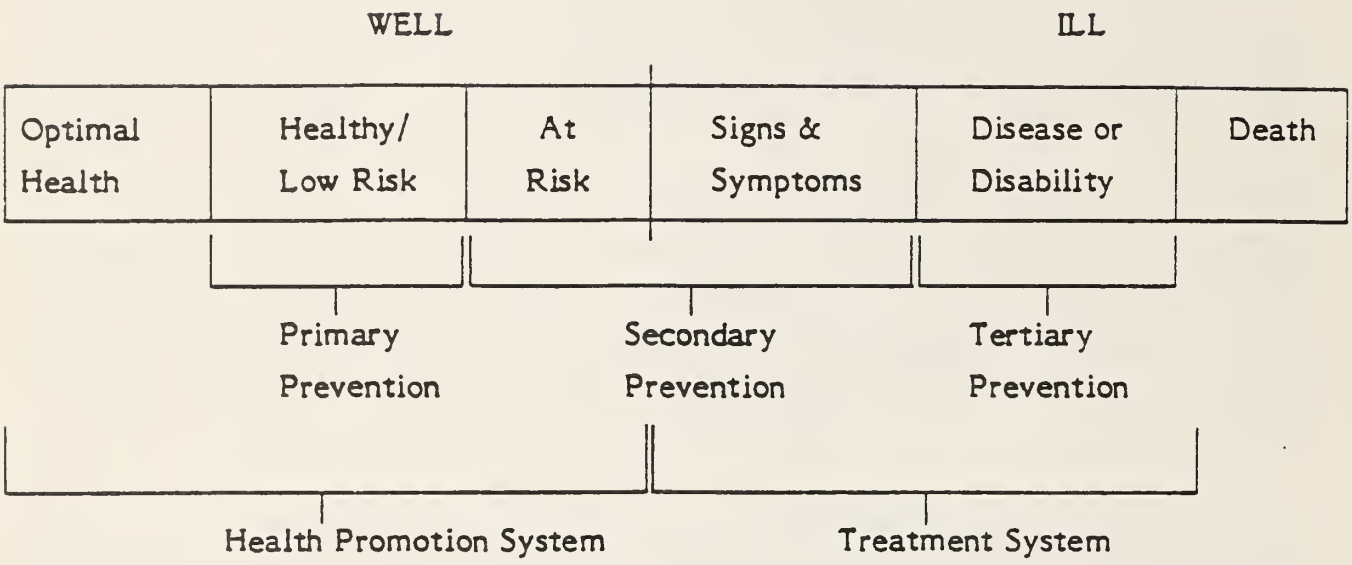
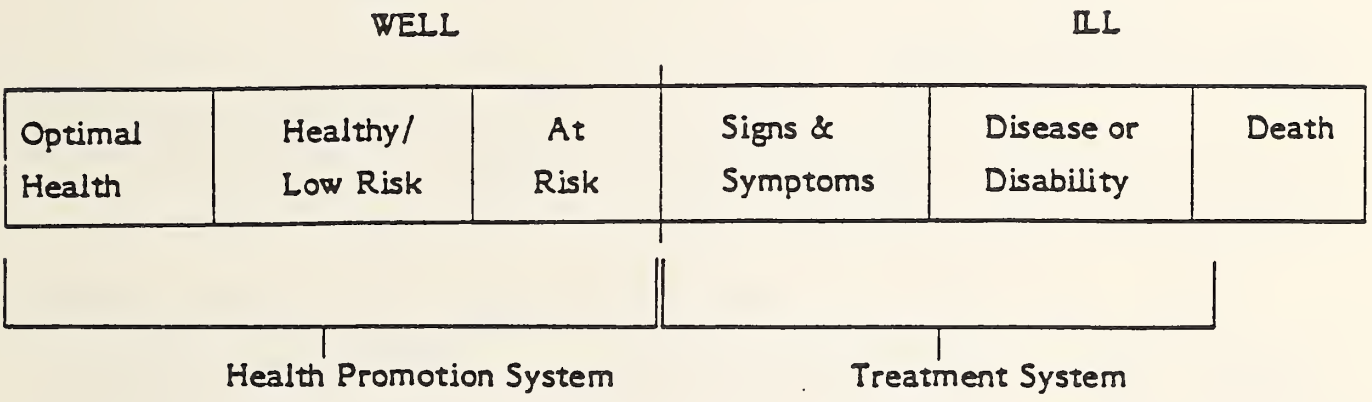


FIGURE 4

Target Populations for Health Promotion and Treatment/Rehabilitation Services



services that focus on the "Well" population, endeavouring to reduce the rate of transition to illness and to increase levels of health. These are the health promotion services, essentially proactive and geared to intervene prior to the biologic onset of illness.

HEALTH PROMOTION AND ALCOHOL PROBLEMS

At this point, I would like to turn our attention to the description of health promotion strategies that can be integrated into this model. I will use alcohol problems as a case study, and briefly work them through the model. A much more detailed study is possible, but unnecessary for our present purposes.

Alcohol-Related Problems

First, let us look at the disease and disability correlates for alcohol consumption. Although there are a number of broad categories of correlates, I have distilled them here into three: chronic health problems, acute health problems, and social/legal problems (Figure 5).

It is important to recognize that the association between alcohol consumption and each type of problem is different. With respect to chronic health problems, the relationship is causal and is related to long-term high average levels of consumption. For acute health problems, the relationship again tends to be causal (in the sense that, had alcohol not been consumed, the problem likely would not have occurred), but this time is more related to overdrinking, or drinking to drunkenness, on a specific occasion. Concerning the broad range of alcohol-related social and legal problems, the relationship is far less direct. The role of alcohol consumption is best characterized as "facilitative", but is usually neither necessary nor sufficient for the problems to occur. Moreover, a specific description of the related form of alcohol consumption is less easily made. Very often, it will include a mix of three risk drinking behaviours: high average levels of consumption, drinking to drunkenness, and drinking and driving.

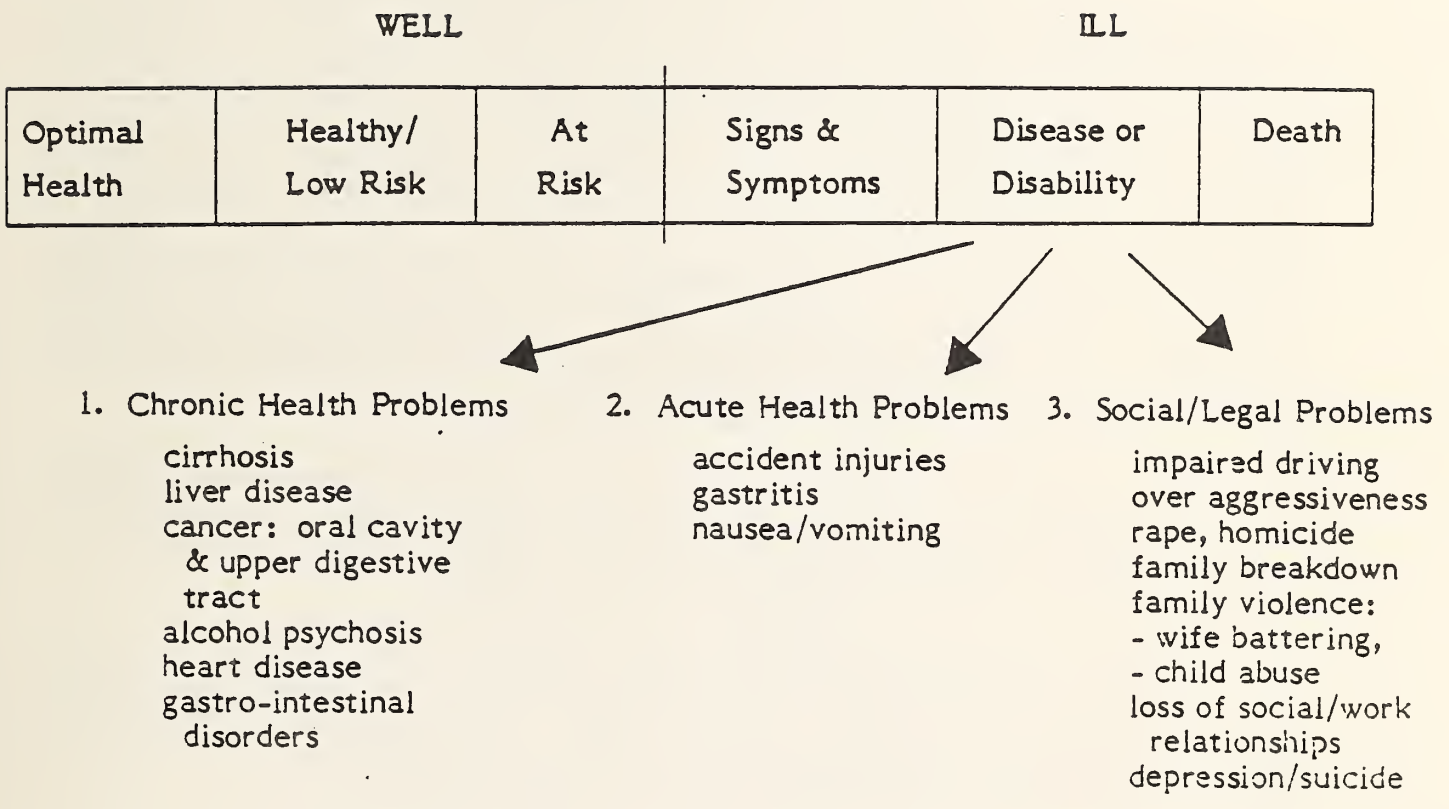
These then are the problems associated with alcohol consumption and represent what it is that we want to prevent through our health promotion interventions.

Alcohol-Related Risk Correlates

Let us now move to the At Risk category, and identify the risk correlates for alcohol-related problems. You will recall that risk status can be conferred according to three criteria: behaviour, environmental

FIGURE 5

Alcohol-Related Problems



conditions, and predisposing characteristics. For this example, I will focus on the first two because they are strongly related to education and policy strategies and can best illustrate the integrative nature of this model.

With respect to the first criterion, we have identified a list of ten "risk drinking behaviours." These are well aligned with potential program responses, and, at the same time, account for virtually all alcohol-related problems (Figure 6).

I suggest that the first three, high average levels, drinking to drunkenness, and drinking and driving, account for the majority of alcohol problems, and are interrelated to some extent. From a programming perspective, they can be addressed either singly or in combination. The next five behaviours are contextual: drinking in conjunction with boating, snowmobiling, recreational or household activities, and work. Essentially, there are different settings in which the impairment of psychomotor functioning will increase the risk of poor performance, accidents, and injury. To a large degree they are also lifestyle-related, reflecting the extent to which alcohol is incorporated into everyday activities. They are separated from each other because, for programming purposes, they offer discrete target groups, each with different points of access and requiring different program strategies.

The last two risk behaviours describe special populations, pregnant women and people on medications, for whom any alcohol consumption is unwise. Again, programmatic implications suggest that they should be addressed under a separate focus.

A final point to note about these risk drinking behaviours is that they are all modifiable, and can be influenced at the individual and the group level through program intervention. The concept of describing modifiable risk has been expanded to a broader health promotion focus by a group at the McMaster University Health Sciences Centre.

The FANTASTIC Lifestyle Assessment (Figure 7) covers twenty-five of the most prominent risk correlates, each of which is modifiable. It has been used as a teaching tool for medical students, a public awareness device, a clinical assessment instrument, a population survey instrument, and an interactive computer assessment. Currently we are working on a similarly-formatted instrument for drinking known as the Risk Drinking Assessment Test. But I am digressing again, and will mention no more than these teasers.

FIGURE 6

Alcohol-Related Behaviours

1. High average levels of consumption
2. Drinking to drunkenness
3. Drinking and driving
4. Drinking and boating
5. Drinking and snowmobiling
6. Drinking and recreational activities
7. Drinking and household activities
8. Drinking at the workplace
9. Drinking during pregnancy
10. Drinking while on medication

FIGURE 7

The FANTASTIC Lifestyle Assessment

F•A•N•T•A•S•T•I•C LIFESTYLE CHECKLIST

INSTRUCTIONS:
Unless otherwise specified, place a ✓ beside the box which best describes your behavior or situation in the past month.

*See back for instructions

FAMILY **F**RIENDS	I have someone to talk to about things that are important to me	almost always		fairly often		some of the time		seldom		almost never	
	I give and I receive affection	almost always		fairly often		some of the time		seldom		almost never	
ACTIVITY	I am physically active (gardening, climbing stairs walking, housework)	almost always		fairly often		some of the time		seldom		almost never	
	I actively exercise for at least 20 min eg running, cycling, fast walk	5 or more times/week		4 times/week		3 times/week		1-2 times /week		less than once/week	
NUTRITION	*I eat a balanced diet (See over)	almost always		fairly often		some of the time		seldom		almost never	
	I often eat excess sugar or salt or animal fats or junk foods	none of these		one of these		two of these		three of these		four of these	
	I am within ___ lbs of my ideal weight	5 lbs (2 kg)		10 lbs (4 kg)		15 lbs (6 kg)		20 lbs (8 kg)		not within 20 lbs	
TOBACCO **T**OXICS	I smoke tobacco	never smoked		quit over 5 yrs ago		quit over a year ago		quit in past year		currently smoke	
	I usually smoke ___ cigarets per day	none		5 or less		6-20		21-40		more than 40	
	I use drugs such as marijuana, cocaine	never		almost never		only occasionally		fairly often		almost daily	
	I overuse prescribed or "over the counter" drugs	never		almost never		only occasionally		fairly often		almost daily	
	I drink caffeine-containing coffee, tea or cola	never		1-2/day		3-6/day		7-10/day		more than 10/day	
ALCOHOL	*My average alcohol intake per week is (See over)	0-7 drinks		8-10 drinks		11-13 drinks		14-20 drinks		more than 20 drinks	
	I drink more than four drinks on an occasion	never		almost never		only occasionally		fairly often		almost daily	
	I drive after drinking	never		almost never		only occasionally		once a month		often	
SLEEP **S**EATBELTS **S**TRESS	I sleep well and feel rested	almost always		fairly often		some of the time		seldom		almost never	
	I use seatbelts	always		most of the time		some of the time		seldom		never	
	I am able to cope with the stresses in my life	almost always		fairly often		some of the time		seldom		almost never	
	I relax and enjoy leisure time	almost always		fairly often		some of the time		seldom		almost never	
TYPE OF **P**ERSONALITY	I seem to be in a hurry	almost never		seldom		some of the time		fairly often		almost always	
	I feel angry or hostile	almost never		seldom		some of the time		fairly often		almost always	
INSIGHT	I am a positive or optimistic thinker	almost always		fairly often		some of the time		seldom		almost never	
	I feel tense or uptight	almost never		seldom		some of the time		fairly often		almost always	
	I feel sad or depressed	almost never		seldom		some of the time		fairly often		almost always	
CAREER	I am satisfied with my job or role	almost always		fairly often		some of the time		seldom		never	

STEP 1	Total the ✓s in each column ➤										
STEP 2	Multiply the totals by the numbers indicated (Write in box below) ➤	X4		X3		X2		X1		0	
STEP 3	Add your scores across the bottom for your grand total ➤		+		+		+		=	%	GRAND TOTAL

Name_____ Age_____ Sex M☐ F☐

As you will recall, the second criterion for risk status is environmental conditions. With respect to alcohol problems, these operate almost exclusively in an indirect manner. That is, environmental conditions serve either to impede or facilitate the adoption of the ten risk drinking behaviours, and thereby have impact on the rates for alcohol problems. There are two principal forms that environmental conditions take. The first is known as Availability Controls. These serve to limit or increase access to alcohol through legal means and days of sale, price, the frequency of outlets, and the conditions under which sales can occur.

The second form in which environmental conditions can occur is Social Controls. These are, for the most part, legal proscriptions on such behaviours as drunkenness or public intoxication, serving someone to intoxication, and driving while impaired. Increasingly, these controls are being extended to civil liability cases whereby provider responsibility is being claimed for the harmful consequences of alcohol consumption. Collectively, social controls establish the limits to drinking behaviour and punish those who exceed them.

Alcohol-Related Health Promotion Strategies

I mentioned earlier that from the perspective of preventing problems, there are two principal health promotion strategies: Risk Reduction and Risk Avoidance. When applied to this case study on alcohol problems, these strategies suggest two overall goals:

a. reduce the prevalence of the ten risk drinking behaviours in the population (Risk Reduction);

b. reduce the incidence of the ten risk drinking behaviours in the population (Risk Avoidance).

Again, there are two principal ways in which these goals can be addressed: through educational programs and through the introduction of policies. In the broadest sense, the purpose of the educational approach is to cause people to adopt low risk drinking behaviours of their own choice, and in their own self interest. The purpose of the policy approach is to adjust the environment so that it facilitates the adoption of the low risk behaviours and impedes the adoption of their risk counterparts. Viewed in this way, three fundamental propositions can be developed:

a. that either approach alone is likely to have less impact than a combined approach;
b. that a single approach can be neutralized or sabotaged by the conflicting messages of the other; and
c. that the largest gains can be realized from employing both approaches in a mutually reinforcing way.

CONCLUSION

I would like to submit to you that our health promotion interventions should incorporate the combined education and policy approach wherever possible. The Campus Alcohol Policies and Education (CAPE) project that will be described to you later in this symposium is an important step in this direction. I further submit that we should invest our energies in the continuing development and refinement of educational technologies, in our ability to cause people to choose low risk options. It is an area in which I have perceived great gains in recent years, and an even greater potential in the years to come. In addition, we must devote our energies to the further identification of existing policies that impede the adoption of low risk drinking behaviours. We must then develop and evaluate more enlightened substitutes. Again, and I am certainly preaching to the converted in this group, this is currently a very active area in which great strides are being made.

Finally, let us avoid the trap of alienating our allies. We should, for example, be making overtures to health educators. We should be showing them models of health promotion that endorse both the policy and educational approaches. We should be collaborating with them on special projects that feature the "combined approach". We should not be dismissing policy approaches that we might like to have implemented.

In conclusion, I hope that you have found this attempt to define health promotion beneficial. More important, I hope that you are willing to accept the relationship and interdependence between the educational and policy approaches. And finally I hope you found the case study on alcohol problems provided a true fit to reinforce the value of an integrated model. Thank you for your attention.

ACKNOWLEDGEMENTS

I would like to thank Dr. Douglas Wilson, Department of Family Medicine, McMaster University, for permission to use the FANTASTIC Lifestyle Assessment.

REFERENCES

Ardell, D.
1978 "High Level Wellness and the H.S.A.'s: A Health Planning Success Story", American Journal of Health Planning, (July)

Fries, J.F.
1980 "Aging, Natural Death, and the Compression of Morbidity". New England Journal of Medicine, (July) p. 130-135

Hamilton, G.
1981 Health Promotion Report. Kenora-Rainy River District Health Council, Kenora, Ontario

Townshend, P. and N. Davidson
1982 Inequalities in Health: The Black Report. Markham: Penguin Books.

White, N.F.
1984 "Concepts of Health", in Health, Science and Society. Hamilton: McMaster University Faculty of Health Sciences, p. 142-148

Wilkuns, R. and D.B. Adams
1982 "The Distribution of Health Expectancy in Canada: Demographic, Regional, and Social Dimensions. Paper presented at the annual meeting of the Canadian Sociology and Anthropology Association, at the Learned Societies Conference, Ottawa: University of Ottawa, June 9

REDUCTION OF HEAVY DRINKING THROUGH CHANGES IN PUBLIC ACCEPTANCE OF ALCOHOL CONSUMPTION: A COMPUTER SIMULATION FOR NORTH CAROLINA, USA

Harold D. Holder
Director
Prevention Research Center
Berkeley, California

INTRODUCTION

In keeping with the basic theme of this conference, my paper is about prevention and the reduction of heavy, high-risk drinking. Typically, when we think about alcohol abuse we think about individuals, their drinking problems and their need for treatment. I want to move away from our direct experience and think more abstractly.

Alcohol use and abuse occur at the community level and are part of a network of variables. Typically when we undertake prevention activities we utilize what I call the "traditional approach" to alcohol prevention. Under this approach we think first about what action can be taken, given an alcohol-related problem, e.g. alcohol-involved traffic crashes. We make assumptions about the relationship between the problem and the program. However, we sometimes fail to understand what community factors are working for us and what are working against us.

I want to underscore that many prevention activities are potentially effective in a community except when other forces which are extraneous to our program produce negative results. In practice, we do not know why this has happened. A different approach is what I call a systems approach to alcohol prevention. It requires an understanding of the complex alcohol use and abuse system. With an understanding of the system we can begin to search for those actions, strategies, and programs which have a better chance of producing desired results.

This paper describes an application of a systems approach through computer modelling to investigate the impact of a prevention program to change per capita consumption as a means to reduce heavy, high-risk drinking. Through computer simulation, where the model "acts like" the real world, we are able to explore likely outcomes under three conditions: 1. "business-as-usual", make no changes in the expected growth in per capita consumption; 2. stabilize per capita consumption to prevent any further growth; and 3. reduce per capita consumption.

EMPIRICAL RELATIONSHIP OF CONSUMPTION TO ALCOHOL-RELATED PROBLEMS IN NORTH CAROLINA

Consumption of alcoholic beverages, considering frequency, quantity, and historical pattern, is an important consideration to any model for prevention policy formulation. Two basic ways to measure (or estimate) consumption are (1) personal interviews and (2) sales of alcoholic beverages. Personal interviews which in principle permit the identification of heavy drinkers in the population based on self reports of frequency and quantity of consumption have problems including underestimates of personal consumption. Personal estimates are rarely sufficient when generalized to an entire population and do not account for the amount of total alcoholic beverages sold even considering "tourist" consumption. Another problem is that surveys are not readily conducted in all areas of the country over time.

Alternately, to measure consumption using the quantities of spirits, beer, and wine sold per capita has a number of problems including under or over reporting, but these are the longitudinal data most available for model formulation and they are available for each state and most substate areas. As a surrogate measure of consumption, it is most appropriate to call this "apparent" consumption. Therefore, from here on when we refer to "consumption", we mean "apparent consumption".

Any per capita measures of consumption obscure the fact that a small percentage of the population consumes a considerable share of alcoholic beverages. These heavy drinkers are the population which contains those diagnosed as "alcoholics" for treatment, those most likely to be arrested for DUI or public drunkenness, and to have job or family difficulties related to their drinking. However, a number of studies have demonstrated that the "per capita" measures of consumption are correlated with indicators of difficulties with drinking. (Terris, 1967; Brenner, 1975; Popham, 1978; Bruun et al, 1975; Smart, 1974; deLint and Schmidt, 1968; and Schmidt and deLint, 1970). These studies support the practical use of such measures as forecasters of difficulties and suggest that heavy drinking is sensitive to total sales. A review of five surveys of drinking practices by Room and Beck (1974) concluded that increases in per capita consumption is not explained by increased percentages of the problem drinking but rather by increased amounts of total drinking by the population of drinkers. As Bruun, et al (1975) said,

> The hypothesis that the proportion of heavy users in the drinking population is independent of the general consumption level is not substantiated by the available data. Low consumption countries exhibit a low prevalence of heavy users, while countries with high per capita consumption have a high prevalence ... A substantial increase in mean consumption is very likely to be accompanied by an increased prevalence of heavy users. (p. 43)

Per capita consumption was therefore chosen for our study of North Carolina because of the research literature support for its use as an acceptable indicator of problems relating to drinking and because the historical data are available to permit trend analysis. It is possible to use measures of per capita consumption based on distilled spirits alone, distilled spirits plus beer and wine, or absolute alcohol. This project considered all three in North Carolina and found that the high correlation between the three measures of apparent consumption (absolute amount of alcohol for distilled spirits, wine and beer) with a Pearson correlation was .966. It is not surprising as the absolute alcohol consumption calculation is primarily composed of distilled spirits consumption with an average absolute content of .43 compared to wine with .145 and beer with .045.

The system behaviour reflected in this plot of per capita consumption appears to follow a pattern often seen in dynamic systems. One can postulate that the level of consumption at any point in time over this 20+ year period is related to other variables or forces surrounding consumption as well as consumption at prior times. The curves would appear to be "limit seeking", that is, they move toward a particular limit or level at any point in time. The velocity or speed of approach is related to the distance away from the limit, i.e. the further away from the limit the greater the ascent (or descent) to the limit. As the curve gets closer to the limit the rate of ascent slows. As this adjustment is slow (subject to delay), it is possible to over-shoot the limit and then drop back below the limit to correct.

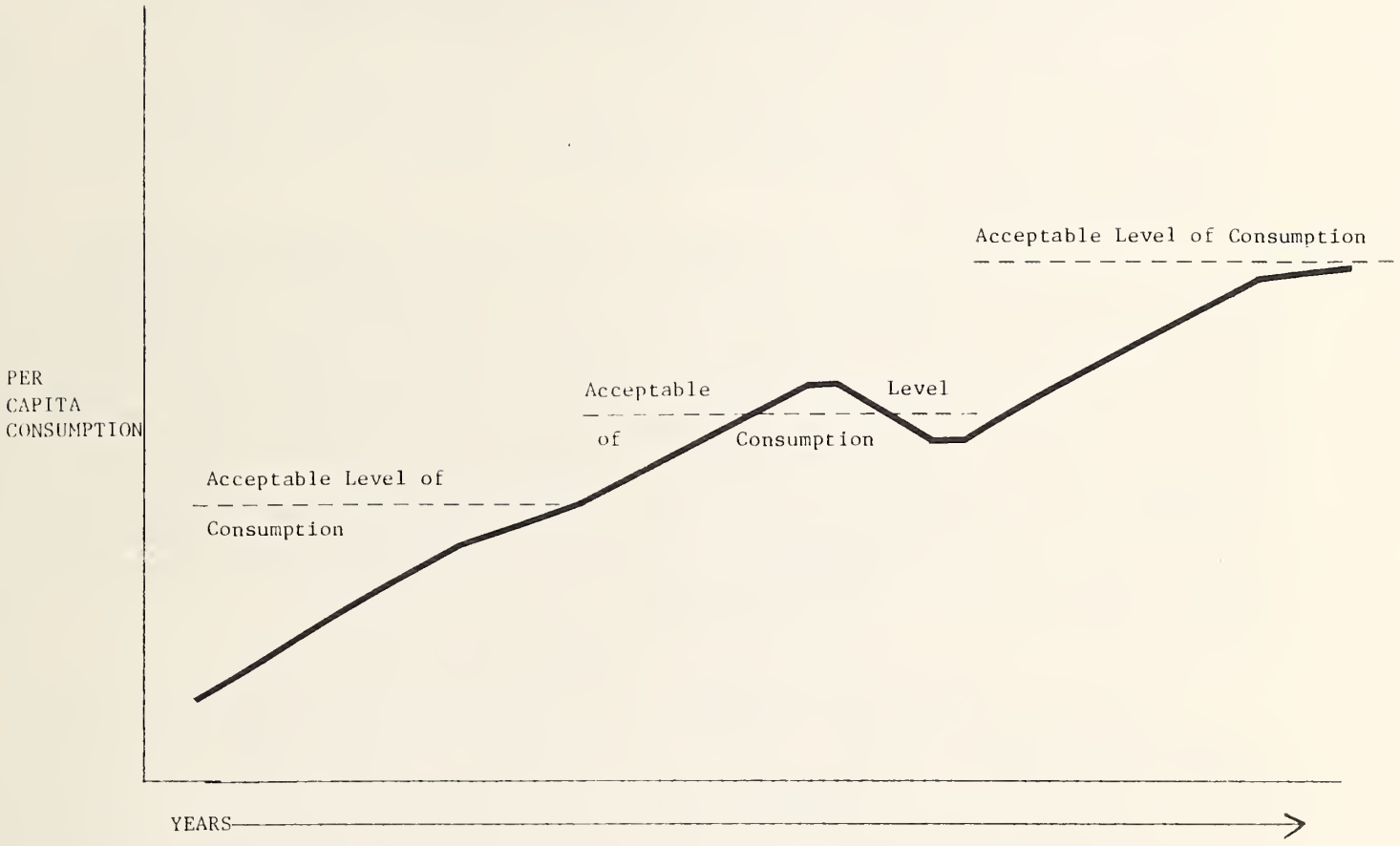
If one postulates a socially assigned limit (community norm) on consumption to be operating, then actual consumption of distilled spirits could follow the limit-seeking behaviour described. This is illustrated in Figure 1 where three example situations are shown. The first is a rapid rise of actual consumption to close the distance to the current acceptable level of consumption. When the current level comes close to the limit, the ascent slows. In the second situation, the acceptable level of consumption has been raised and the curve once again moves in a sharp ascent and actually exceeds the acceptable level. Correction takes place, and the curve drops back below the level to once again ascend. In the third situation, the curve is asymptotic, i.e. approaches but does not exceed the limit.

DERIVATION OF AN ACCEPTABLE OPEN LIMIT OF CONSUMPTION

If one postulates the existence of a social regulator or limit on the consumption of distilled spirits than it is quite natural to investigate phenomena which may be indicators or surrogate measures. Factors which would seem most naturally to affect any limits that are established for consumption would include:

FIGURE 1

EXAMPLES OF PATTERNS IN ANNUAL PER CAPITA ALCOHOL CONSUMPTION



- economics: relating to people's available money to purchase alcohol, the relative price of alcohol, and the available disposable income which itself is affected by the general cost of living

- educational factors: the awareness or sophistication of people about availability of distilled spirits, its appropriate use, its risk, etc.

- mobility factors: the ability of people to get to supplies of alcohol primarily affected by the easy availability of the automobile

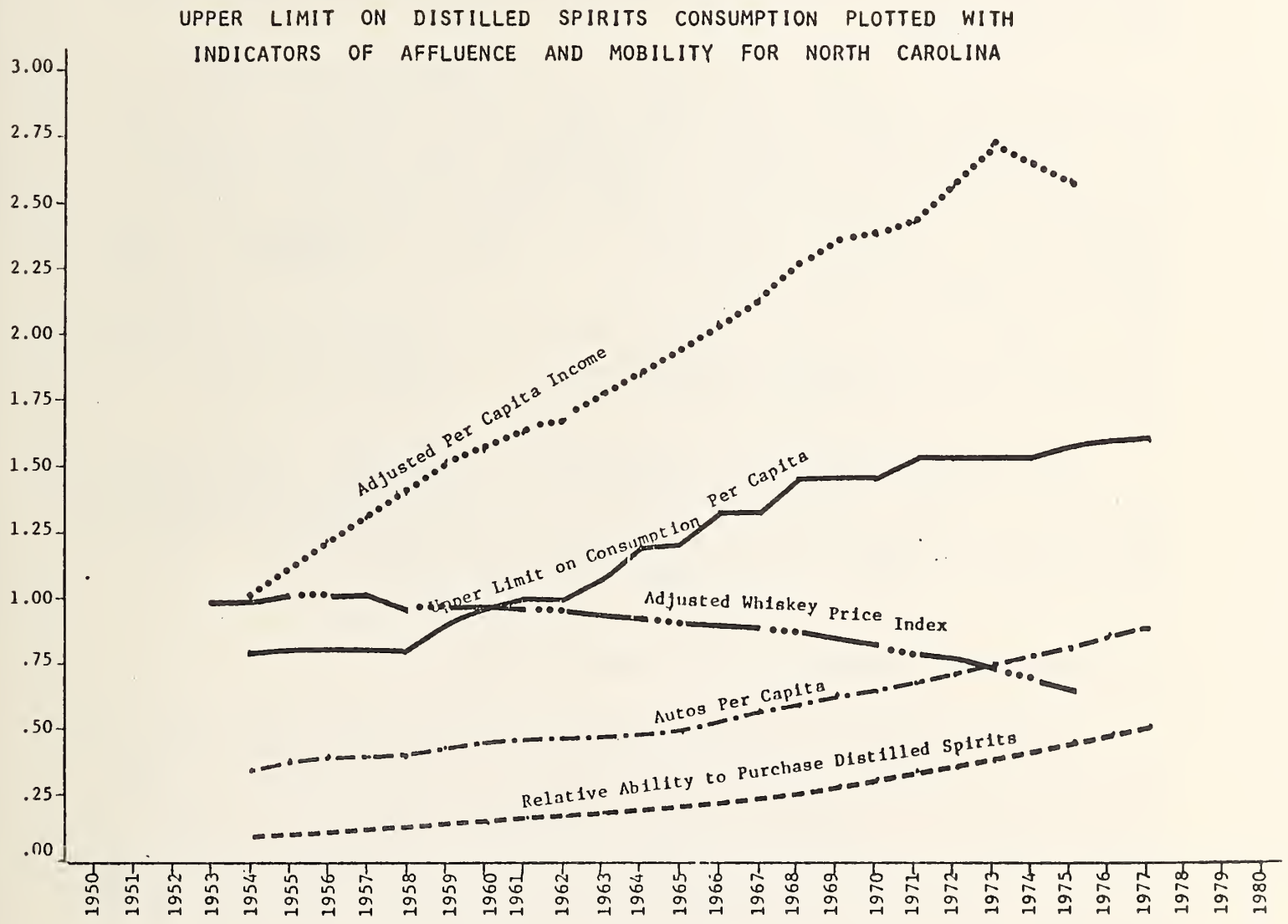
- availability: the number of liquor stores and other outlets and their availability to the population as well as any legal restrictions on general availability of alcoholic beverages such as in a "dry" county or city in North Carolina

Investigation of these factors through available measures shows a high association between per capita distilled spirits consumption, registered autos per capita (as an indicator of mobility), the adjusted whiskey price index (the whiskey price index divided by the consumer price index) as an indication of the relative cost of distilled spirits, and the relative ability of individuals to purchase distilled spirits (per capita income in North Carolina divided by the whiskey price index) as an indication of potential disposable income available for purchasing distilled spirits. Per capita registered automobiles and the relative ability to purchase distilled spirits are highly correlated with per capita consumption of distilled spirits ($r = .97$ and $.96$) and the adjusted whiskey price index is negatively correlated ($r = -.97$).

Adjusted per capita income (per capita income divided by the consumer price index and the median education for North Carolina using only census years) is also positively correlated with per capita distilled spirits consumption ($r = .89$ and $.68$). In addition, per capita distilled spirits consumption along with the absolute number of ABC stores in North Carolina and the percentage of the population in cities or counties which permit the sale of whiskey are highly associated, for example, per capita consumption with "wet" population, $r = .974$.

If we now assume our postulated upper limit of consumption to be a composite result of factors which seem to be highly predictive of consumption, then we can construct an hypothesized upper limit for the years over which the study has been conducted. By breaking the plot of per capita distilled spirits consumption into two-year units, a series of limiting levels can be developed for each unit. A plot of this "upper limit on per capita consumption" of distilled spirits is shown in Figure 2.

FIGURE 2


UPPER LIMIT ON DISTILLED SPIRITS CONSUMPTION PLOTTED WITH INDICATORS OF AFFLUENCE AND MOBILITY FOR NORTH CAROLINA
3.00
2.75
2.50
2.25
2.00
1.75
1.50
1.25
1.00
.75
.50
.25
.00
Adjusted Per Capita Income
Upper Limit on Consumption Per Capita
Adjusted Whiskey Price Index
Autos Per Capita
Relative Ability to Purchase Distilled Spirits
1950
1951
1952
1953
1954
1955
1956
1957
1958
1959
1960
1961
1962
1963
1964
1965
1966
1967
1968
1969
1970
1971
1972
1973
1974
1975
1976
1977
1978
1979
1980

OUTLINE OF A COMPUTER MODEL

Below is an outline of a potential computer model dealing with some of the significant variables concerning the relationship between alcohol use. It should be noted that this is an outline for example and illustration purposes and not necessarily a total and complete model. The system of which alcohol use is a part is dynamic and complex and therefore system dynamics, a language especially developed for such situations, was used for this model.

A simplistic layout of the model, using system dynamic symbols, is shown in Figure 3 which indicates that the population of the state contains a subgroup of drinkers. This subgroup can be further stratified into groups based on quantity and frequency. This drinking population consumes alcoholic beverages which, when inappropriately used, results in problems such as arrest, the need for treatment, and early death. The dotted lines in Figure 3 illustrate the "feedback" of dynamic systems where the state or level of variables at one point in time can affect other variables and its own future over time. In short, a variable can affect itself. Such dynamic systems become too complicated very quickly for ease in understanding and computation and a computer is needed to "act out" the system or to simulate it.

This outline is illustrative of the types of variables and relationships which appear to be functioning in the real world. A general review of research literature in the area suggests such variables and their inter-relatedness. It should also be noted that this model does not include every possible variable which might be included.

CONSTRUCTION AND VALIDATION OF THE COMPUTER MODEL

The consumption of alcohol in North Carolina is a central factor in our computer model. In this analysis, the average consumption of distilled spirits per capita for all residents of North Carolina is taken to be governed by a social norm or acceptable level of consumption as already described. During the years of this analysis, North Carolina has been a control state with distilled spirits available only through individual purchases in state-controlled ABC stores and public consumption of alcohol was limited to so-called "brown bagging" in licenced eating establishments.

The first part of the model addressed consumption only and included a variable "acceptable upper limit on per capita consumption" of distilled spirits. A diagram of this sector is shown in Figure 4. The acceptable upper limit is a function of price, available income to purchase distilled spirits, mobility, and availability. These independent variables were described previously.

FIGURE 3

SIMPLIFIED LAYOUT OF ALCOHOL CONSUMPTION AND PROBLEMS

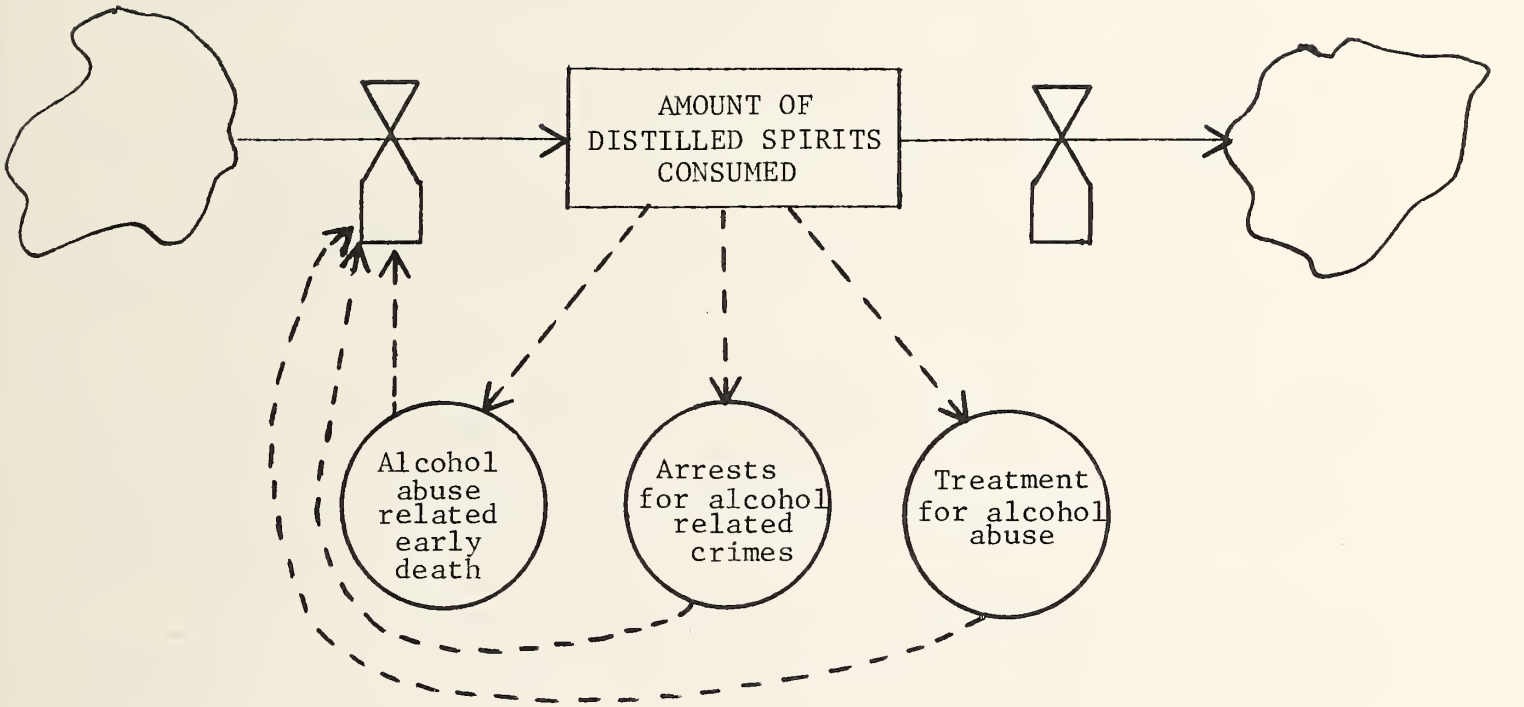
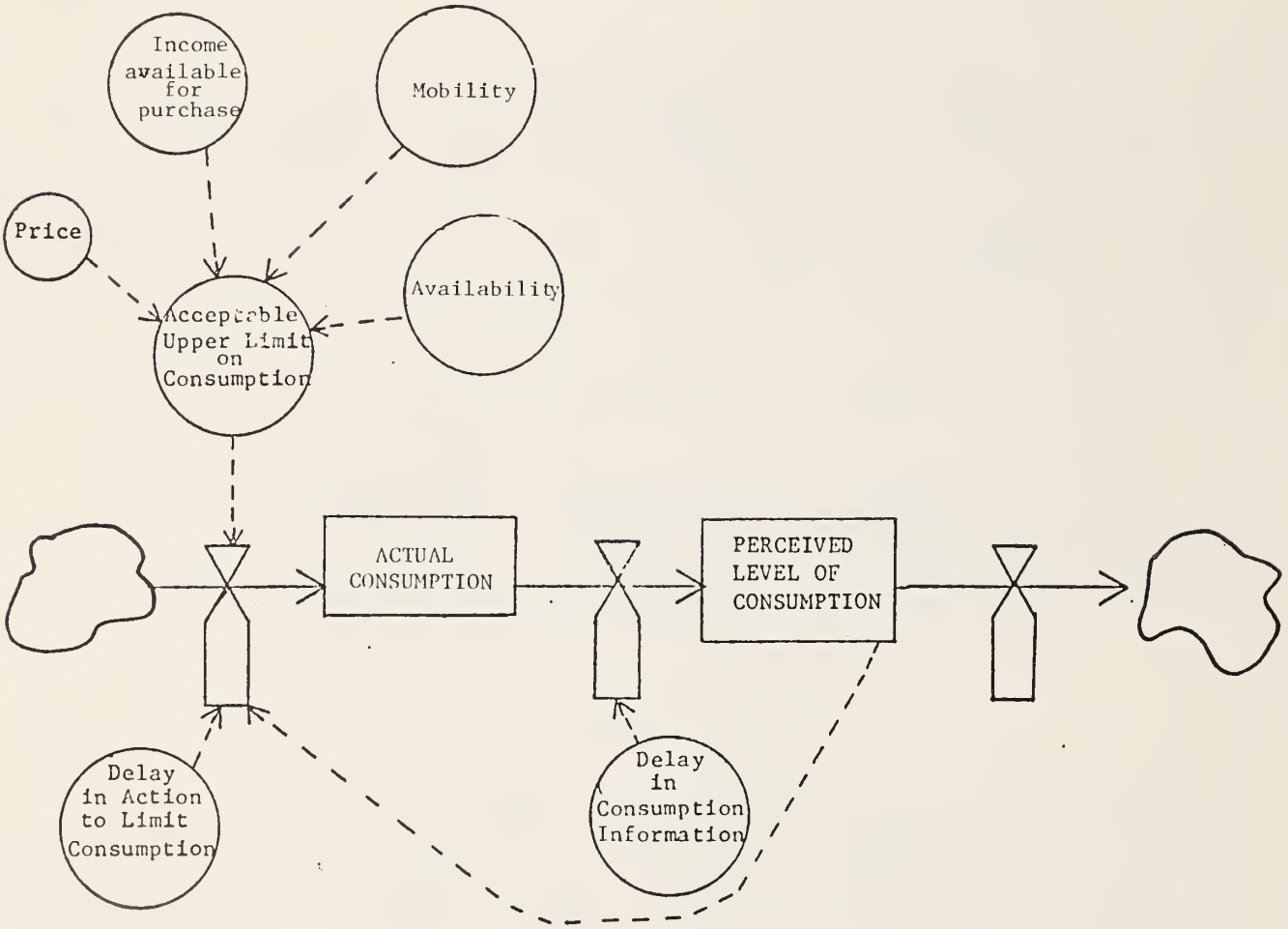


FIGURE 4

DIAGRAM OF ALCOHOL CONSUMPTION SECTOR



The "actual consumption of distilled spirits" is affected by the existing limit on consumption, a delay in responding to an existing system, and the perceived level of consumption. In any dynamic system variables have been shown to lag in their response to other variables, i.e. the full affect of one variable on another is subject to delay. Within any social system the actual level of drinking is never known. Rather social action is based on people's perceptions about the level of drinking. This is expressed in this sector of the model as a variable which lags behind the actual level of consumption, i.e. it is subject to delay.

To validate this sector of the model, we tested the loaded model's ability to recreate history; specifically, per capita consumption for the years 1950-1977. The results of this test are shown in Figure 5 where the solid line is the actual historical value and the dotted lines are the values yielded by the model. Note that the dotted line is smoother than the solid line. This results because the computer model makes predictions over quarterly (four month) units and the plotted actual values are annual data.

As one can see, the match between actual and prediction is very close which lends support to our use of the limiting variable to regulate consumption and that with an improved understanding of this social norm or limit, it has been possible to produce an acceptable reconstruction of the past and potentially an acceptable projection of the future consumption in North Carolina.

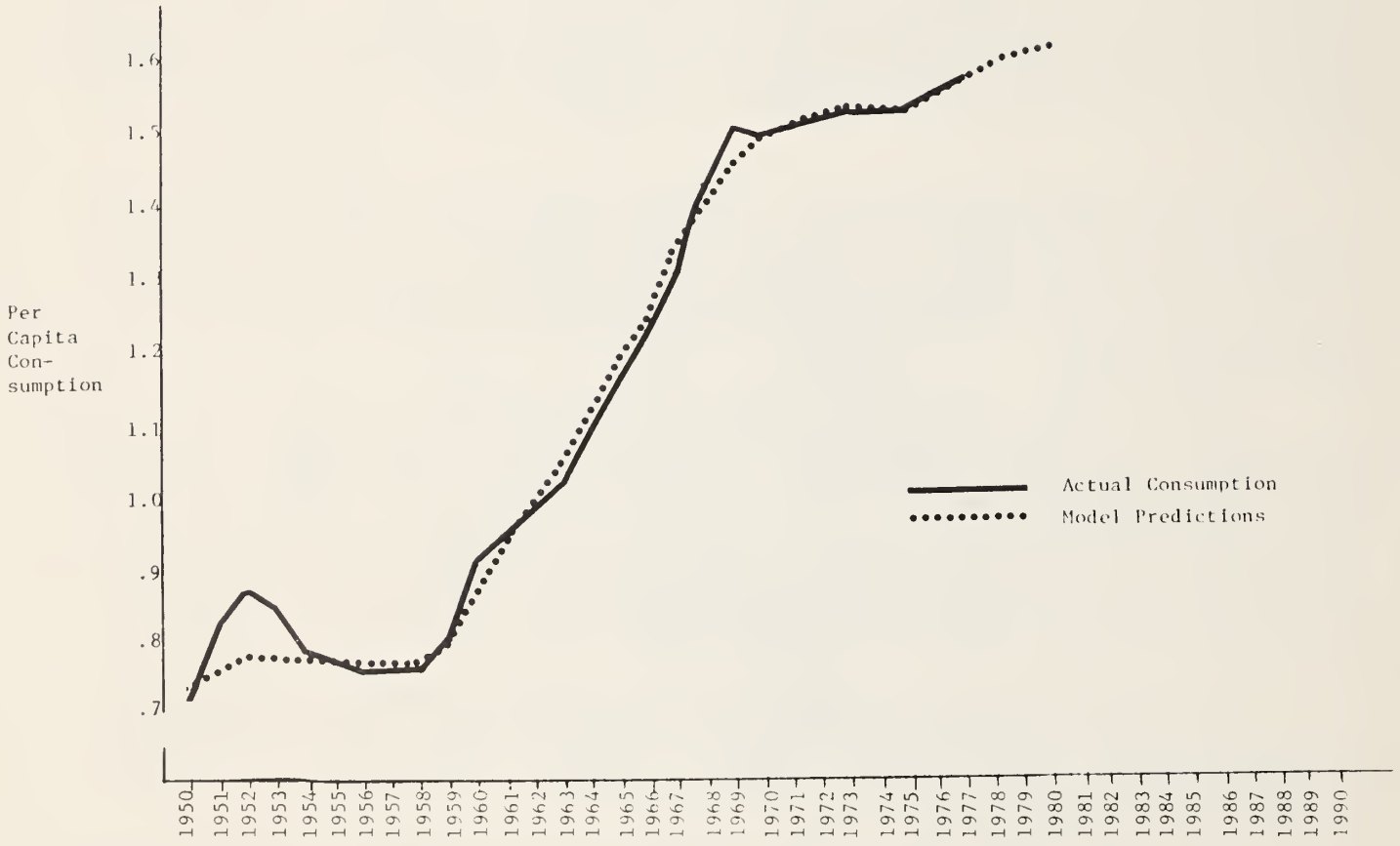
It is important to note that this is simply not a "curve fitting" experiment, and that traditional linear regression techniques have not been used in this model. Rather the computer model, which has been described generically as a dynamic entity, is loaded with initial values and specific relationships between variables and started up. The initial validation of the model is then whether or not it can acceptably reconstruct known trend distributions of important variables.

This first sector of the model was expanded to include an indicator of early death (cirrhosis deaths per 10,000) and need for treatment (admissions to four state mental hospitals and three alcoholic rehabilitation centres).

The prediction of cirrhotic mortality by the model is based on the correlation previously described for North Carolina, i.e. $r = .948$. An increase in per capita drinking most likely increases the number of individuals in the risk pool who are susceptible to cirrhotic death. As the development of cirrhosis takes a longer term, 10-15 years, the affects

FIGURE 5

PLOT OF ACTUAL DISTILLED SPIRIT CONSUMPTION AND COMPUTER MODEL PREDICTIONS — NORTH CAROLINA, 1950 - 1980



of increasing the at-risk population will not be shown immediately in mortality data for cirrhosis. While the cirrhotic process can be halted by abstinence, resumption of heavy alcohol uses can bring the decomposition process of the liver to its previous state in a short period of time (Brenner, 1975). It is therefore possible during periods of increased consumption to expect that previous at-risk drinkers who had left the pool through abstinence could pick up where they left off and experience early death through cirrhosis (Terris, 1967). Brenner (1975) showed but a one- to two-year lag between increases in per capita consumption and increases in cirrhosis mortality.

The model yielded a fit between actual mortality data and computer predictions as shown in Figure 6. The computer projections clearly follow the trend of actual mortality but do not fit each of the valleys and peaks of the actual data. This is likely the result of both (1) the model yielding smoother estimates over the time series, and (2) reporting errors caused by physicians.

The public inpatient treatment for alcoholism is a function of available beds, average length of stay, demand or pressure for treatment created by increasing numbers of chronic problem drinkers needing inpatient treatment and the prior numbers of admissions at any time as well as internal policy to reduce the number of admissions and any competition for inpatient cases from private and public local inpatient detoxification programs.

Introducing these factors into a subsystem of the model to represent the public inpatient treatment sector yields a prediction of annual admissions for comparison with actual admissions, as shown in Figure 7. As with the other variables, the computer projections show a smoother growth than the actual values. There is a sharp turn down in admissions after 1975 which is a result of a public policy of de-emphasis on inpatient treatment at the state hospitals and an increased use of local (usually hospital-based) detoxification services.

The close association of historical values for major variables with those yielded by the computer model increases our confidence in the model as a vehicle for prediction. This does not mean the model can forecast the future without error, however, if the basic relationships of the model remain the same in the future, the model's forecasts can be used tempered with the caution that any forecast is subject to the affects of unknown and unexpected variables.

FIGURE 6

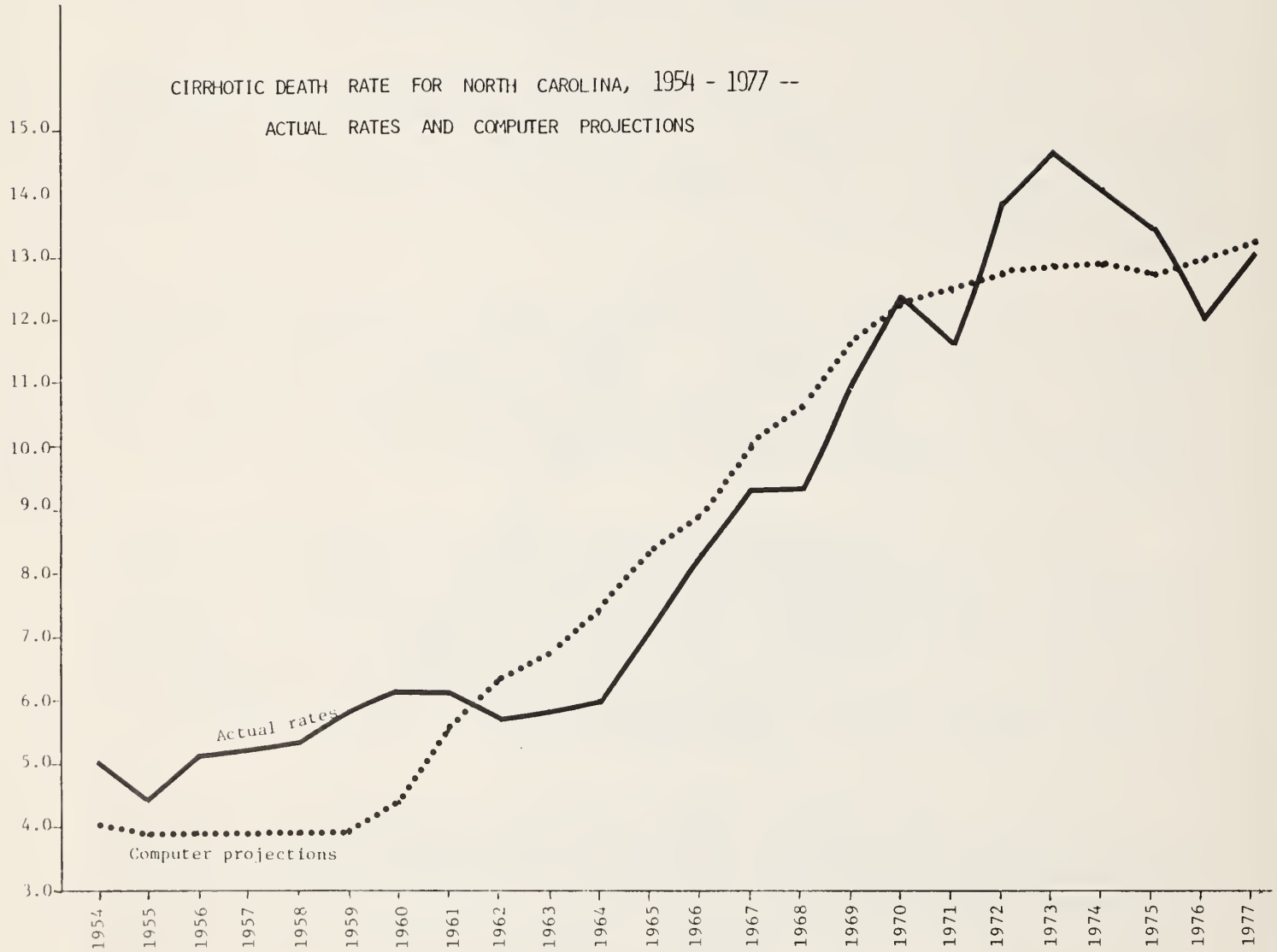
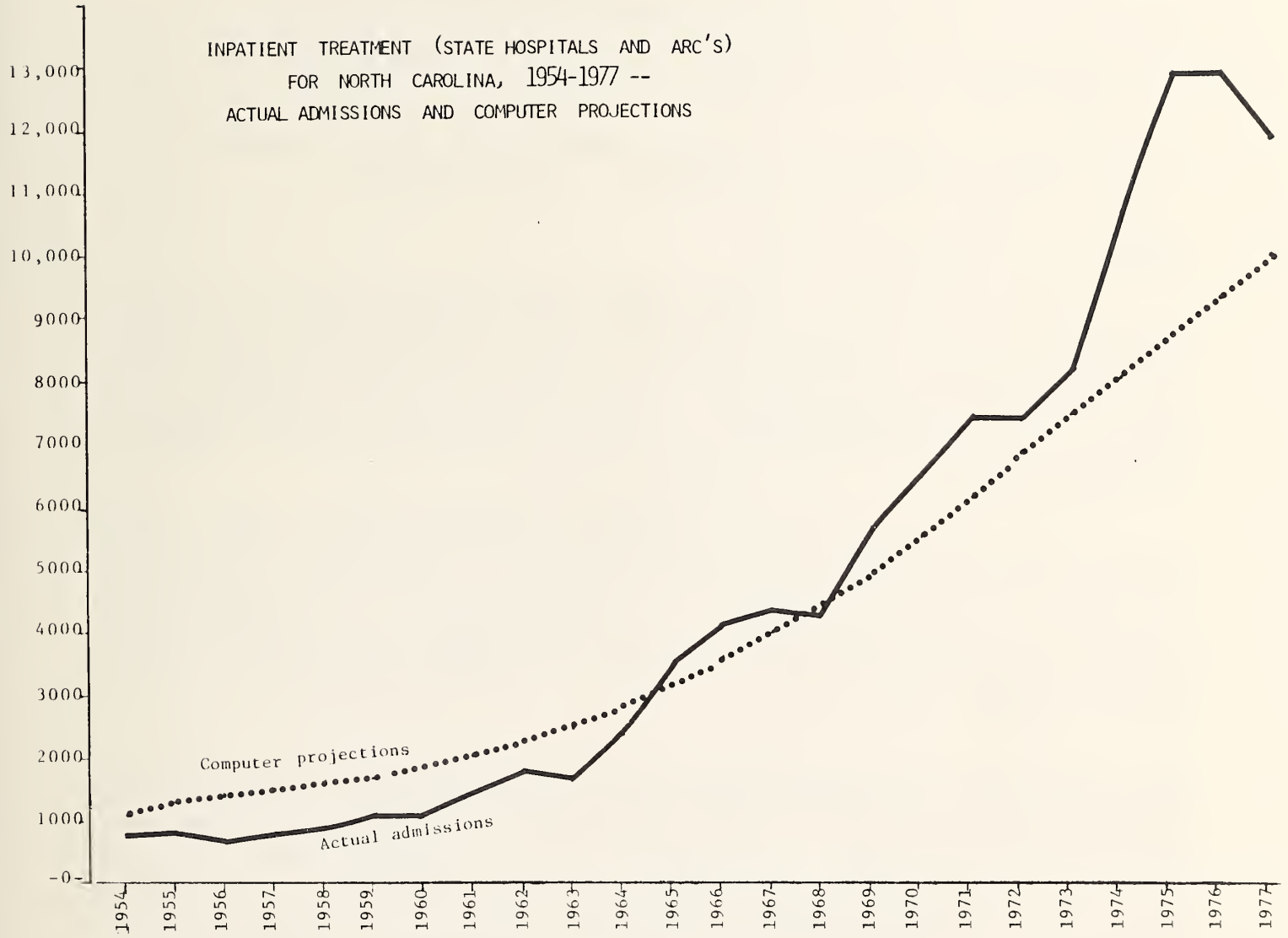

CIRRHOTIC DEATH RATE FOR NORTH CAROLINA, 1954 - 1977 --
ACTUAL RATES AND COMPUTER PROJECTIONS
15.0
14.0
13.0
12.0
11.0
10.0
9.0
8.0
7.0
6.0
5.0
4.0
3.0
Actual rates
Computer projections
1954
1955
1956
1957
1958
1959
1960
1961
1962
1963
1964
1965
1966
1967
1968
1969
1970
1971
1972
1973
1974
1975
1976
1977

FIGURE 7


INPATIENT TREATMENT (STATE HOSPITALS AND ARC'S)
FOR NORTH CAROLINA, 1954-1977 --
ACTUAL ADMISSIONS AND COMPUTER PROJECTIONS
13,000
12,000
11,000
10,000
9000
8000
7000
6000
5000
4000
3000
2000
1000
-0-
Computer projections
Actual admissions
1954
1955
1956
1957
1958
1959
1960
1961
1962
1963
1964
1965
1966
1967
1968
1969
1970
1971
1972
1973
1974
1975
1976
1977

SIMULATION OF PREVENTION STRATEGIES AND DISCUSSION

In keeping with the basic strategy of this project, we explored the potential strategies for intervening in the social structure described by the model. Three strategies in North Carolina were identified:

1. To leave things as they are, without any intervention, that is "business as usual";

2. To prevent further increase in per capita consumption; and

3. To gradually reduce the level of per capita consumption back to the 1965 level.

Figure 8 shows the computer projections for no change in the relationships of variables in the model, i.e. Strategy #1.

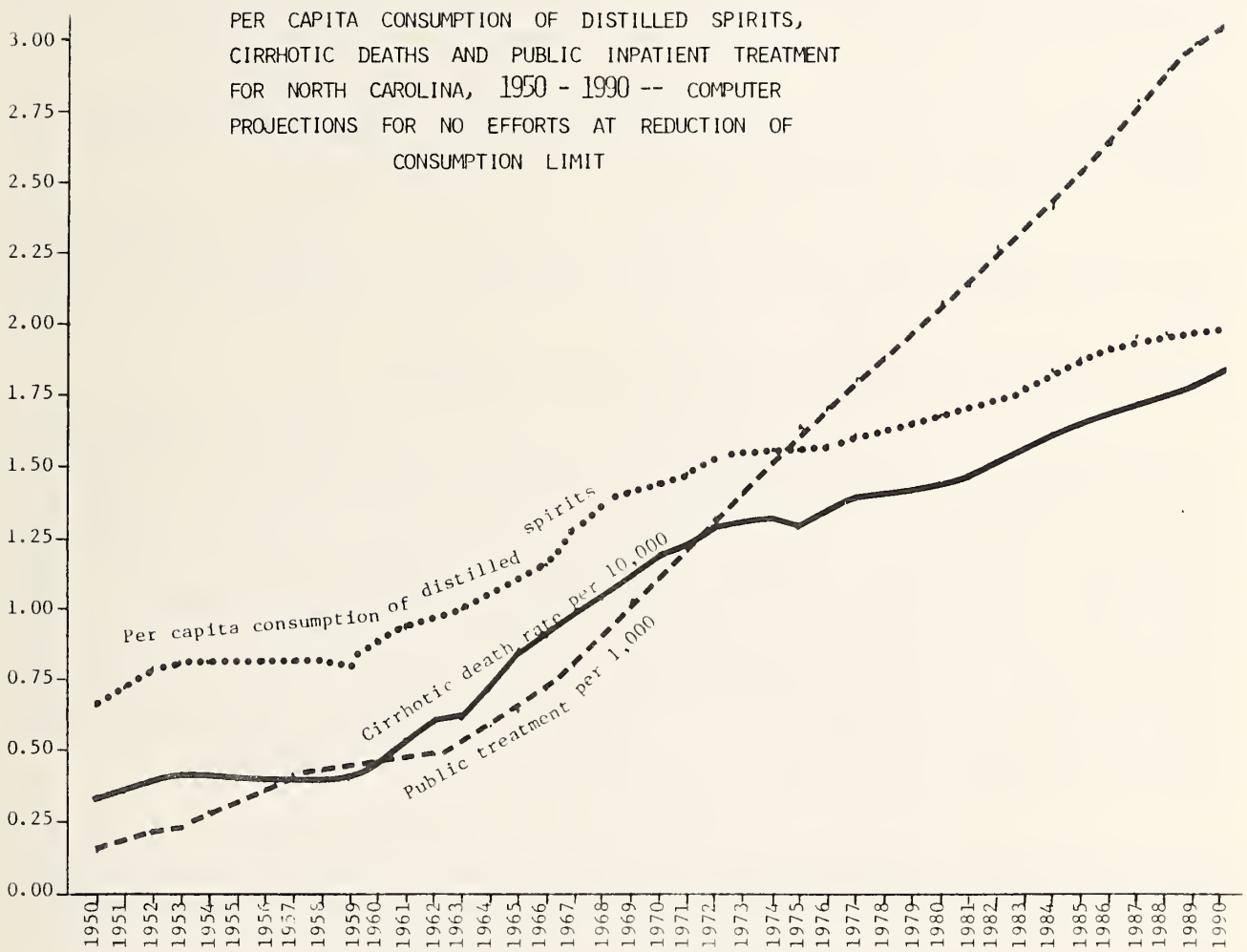
Strategy #1: Business as Usual

Predictions by the computer model have been made up until the year 1990 based on the assumption that no major changes will occur in the relationships between the limiting function and consumption and between consumption and cirrhosis mortality and public inpatient treatment. In a sense these predictions might be likened to "business as usual" where no major prevention intervention occurs and the system is allowed to continue its basic pattern.

It should be pointed out that a major change occured in 1978 in the control of distilled spirits in North Carolina -- namely the introduction of liquor-by-the-drink in most major urban centres in the state and a number of the counties without large urban centres. Arguments that liquor-by-the-drink will have a controlling effect on consumption or a counter argument that it will actually increase consumption have already been discussed.

The bias of this author, based on research with sister states and analysis of consumption data in North Carolina, suggests that liquor-by-the-drink per se will have a neutral to positive effect on individual consumption. At the time this paper is being written, both the United States and Canada are recovering from a recession. It is pretty clear that disposable income is a powerful factor in stimulating alcohol consumption, or in terms of this model, can mean a rise in upper limits on per capita consumption. In other words, as disposable income increases or general affluency increases, there are higher and higher limits on per

FIGURE 8


PER CAPITA CONSUMPTION OF DISTILLED SPIRITS, CIRRHOTIC DEATHS AND PUBLIC INPATIENT TREATMENT FOR NORTH CAROLINA, 1950 - 1990 -- COMPUTER PROJECTIONS FOR NO EFFORTS AT REDUCTION OF CONSUMPTION LIMIT
Per capita consumption of distilled spirits
Cirrhotic death rate per 10,000
Public treatment per 1,000
3.00
2.75
2.50
2.25
2.00
1.75
1.50
1.25
1.00
0.75
0.50
0.25
0.00
1950
1951
1952
1953
1954
1955
1956
1957
1958
1959
1960
1961
1962
1963
1964
1965
1966
1967
1968
1969
1970
1971
1972
1973
1974
1975
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990

capita consumption. During the recession, consumption has leveled off and actually decreased as the result of economic factors alone. However, since drinking also has a powerful psychological aspect, that is, producing a sense of euphoria and well-being, a recession can also stimulate consumption during difficult economic times (Brenner, 1975; Miller, et al, 1974; Cappel, 1975; Holroyd, 1978). Analysis of the consumption data over the last 15 years does not show dips in consumption which correspond to documented recessions during these periods, particularly in the last eight years. Consequently, for this analysis, we have assumed that the effect of the projected recession will not have any significant consequence on individual consumption in North Carolina.

The computer projections of "business as usual" show a gradual increase in individual consumption and a correspondingly predicted increase in cirrhotic deaths and demand for public inpatient treatment.

The upper limit on per capita consumption is taken to be the most potentially powerful variable affecting per capita consumption and is thus the point of intervention for attempting to stablize consumption.

Strategy #2: Stabilization of Per Capita Consumption

By refusing to allow the limit to rise as an attempt to control any further growth in per capita consumption in North Carolina, it is possible to get a prediction of the potential result of this strategy. Figure 9 shows the projected outcome for consumption, cirrhotic deaths, and public inpatient treatment. Cirrhotic deaths follows the stabilization in the individual consumption but public treatment continues to increase. This result is not unexpected as public inpatient treatment is most likely serving only a small percentage of the total chronic problem drinkers or alcoholics in the state and a stabilization of per capita consumption may not have a dramatic affect on the number of heavy drinkers who are in trouble or soon to be in trouble and in need of treatment.

It is possible that stabilization of consumption may not be able to yield such spontaneous stabilization of cirrhotic mortality. However, if one believes that heavy drinking behaviour is related to total consumption, then it is possible to reduce both the size and extent of risk of each death by cirrhosis (Brenner, 1975).

Strategy #3: A Reduction in Per Capita Consumption

The third strategy which might be attempted is a reduction in the per capita consumption of distilled spirits. Figure 10 shows a plot of the three variables under a condition where the upper limit on consumption is actually reduced over time, reducing per capita consumption and

FIGURE 9

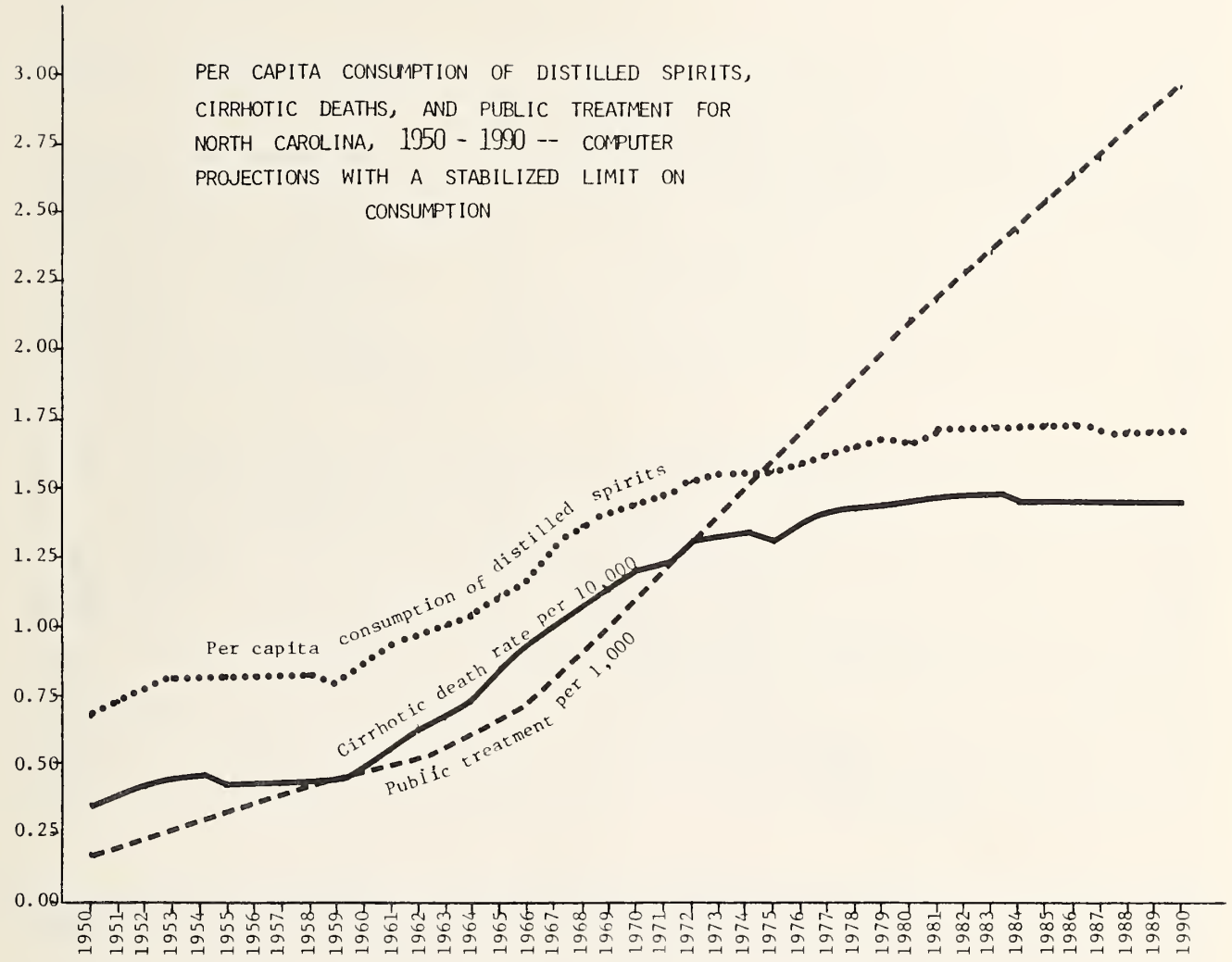
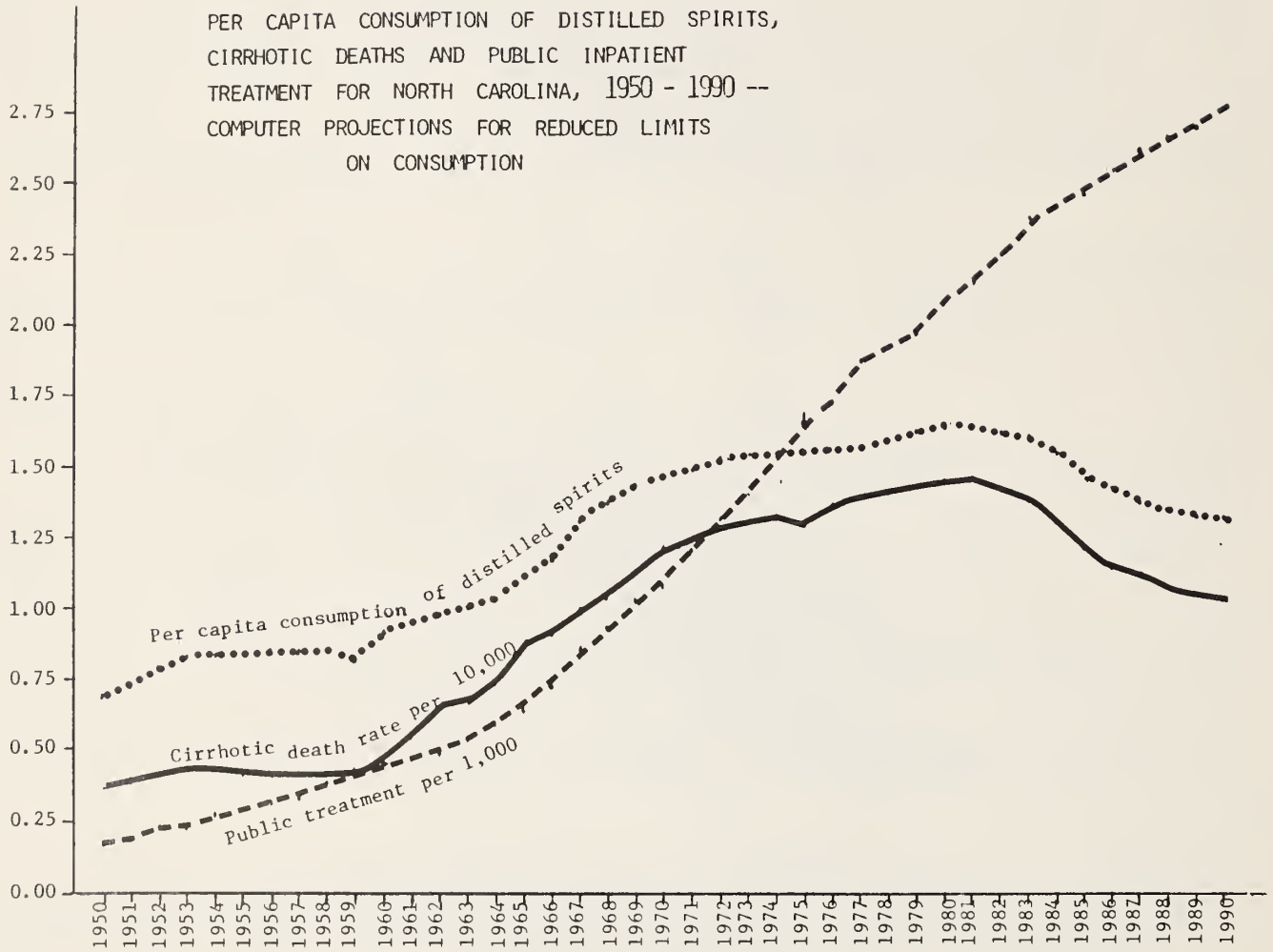

PER CAPITA CONSUMPTION OF DISTILLED SPIRITS, CIRRHOTIC DEATHS, AND PUBLIC TREATMENT FOR NORTH CAROLINA, 1950 - 1990 -- COMPUTER PROJECTIONS WITH A STABILIZED LIMIT ON CONSUMPTION
Per capita consumption of distilled spirits
Cirrhotic death rate per 10,000
Public treatment per 1,000
3.00
2.75
2.50
2.25
2.00
1.75
1.50
1.25
1.00
0.75
0.50
0.25
0.00
1950
1951
1952
1953
1954
1955
1956
1957
1958
1959
1960
1961
1962
1963
1964
1965
1966
1967
1968
1969
1970
1971
1972
1973
1974
1975
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990

FIGURE 10


PER CAPITA CONSUMPTION OF DISTILLED SPIRITS,
CIRRHOTIC DEATHS AND PUBLIC INPATIENT
TREATMENT FOR NORTH CAROLINA, 1950 - 1990 --
COMPUTER PROJECTIONS FOR REDUCED LIMITS
ON CONSUMPTION
2.75
2.50
2.25
2.00
1.75
1.50
1.25
1.00
0.75
0.50
0.25
0.00
Per capita consumption of distilled spirits
Cirrhotic death rate per 10,000
Public treatment per 1,000
1950
1951
1952
1953
1954
1955
1956
1957
1958
1959
1960
1961
1962
1963
1964
1965
1966
1967
1968
1969
1970
1971
1972
1973
1974
1975
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990

reducing the death rate by cirrhosis. Public treatment continues to rise but not at as fast a rate as it had in the two previous strategies which were discussed, and cirrhotic deaths decline as expected.

In this model there is a limit on the treatment capacity of the ABC's but none on the state hospitals, which enables the number of inpatient admissions to rise.

SUMMARY AND OBSERVATIONS

Experimentation in alcohol abuse prevention via computer simulation translates interventions or strategies into changes in a computer model itself. The model is then run on the computer to forecast potential outcomes as a result of each strategy. Simulation can be likened to classical experimentation where a "treatment" is introduced into a test condition to determine if significant changes occur. This paper has described the results obtained from such experimentation as a demonstration of the use of computer simulation as an aid to alcohol abuse prevention policy formulation.

Observations about Computer Simulation and Alcohol Prevention Policy

The approach suggested by any computer modeling includes using the best available research experience and professional wisdom about the relationships between variables in the complex network in which alcohol prevention efforts must exist. This can be used to develop a general model which is analogous to an experiment being conducted in a laboratory. Specific local data must be used for testing any model and for subsequent validation and verification. Through the use of local data, it is possible to modify and fine tune the model to produce results which are closer and closer to the actual data derived and of more direct use to state and local policy formulations.

Note however that this approach to model building is different from that used in statistical modeling in which the model is derived from available data. The statistical approach is limited to the type and number of observations. In the complex network of variables to be included in this model, statistical approaches are inappropriate for the model itself because they cannot handle the long-term, dynamic processes involved in the multiple interactions which are believed to exist. They can, however, be used in the determination of the historical behaviour of variables and to verify hypothesized relationships between variables.

Observations about Reductions of Per Capita Consumption

The research utilized the application of computer simulation to explore the concept of an acceptable upper limit on consumption. It was postulated, based on an analysis of over 20 years of time series for per capita consumption in North Carolina, that such an upper limit was operating at a systems level. Introducing the concept into a computer model resulted in excellent fits of actual historical data with the computer model predictions. As a result we are able to explore the effect of changes in the upper level of consumption as a means for reducing heavy drinking and alcohol-related problems. While existing social and economic forces continue to stimulate per capita consumption in North Carolina, the rate and actual level of growth of drinking and problems are lower if the upper limit on consumption is either stabilized and not allowed to grow or if reduced such that per capita consumption drops.

AUTHOR'S NOTE

As Brenner has observed, "... it is probably not true that the long term trend between per capita alcohol consumption and cirrhosis mortality is directly causal within less than three years" (Brenner, 1975, p. 1281). However, in studying the national curves of cirrhotic deaths and per capita alcohol consumption, the cirrhostic death rate curve appears very responsive (with a year or two) to changes in per capita consumption.

ACKNOWLEDGEMENTS

Partial support for the research described in this paper was provided by the National Institute on Alcohol and Alcoholism, Grant No. 5 H84 AA03744, "Community Alcohol Abuse Prevention Strategies."

I wish to thank Mrs. Janet Jester for her work in gathering the data and for manuscript prerparation.

REFERENCES

Brenner, H.M.
1975 "Trends in Alcohol Consumption and Associated Illnesses: Some Affects of Economic Changes", American Journal of Public Health 65(12), p. 1279-1292

Bruun, K., et al
1975 Alcohol Control Policies in Public Health Perspective, Vol. 25. Helsinki: The Finnish Foundation for Alcohol Studies, p. 39-45

Cappell, H.D.
1975 "An Evaluation of Tension Models of Alcohol Consumption", In: R.J. Gibbons et al, eds. Recent Advances in Alcohol and Drug Problems, p. 177-209. New York: Wiley and Sons, Inc.

deLint J. and W. Schmidt
1968 "The Distribution of Alcohol Consumption in Ontario", Quarterly Journal of Studies on Alcohol 29, p. 968-973

Holroyd, K.A.
1978 "Effects of Social Anxiety and Social Evaluation on Beer Consumption and Social Interaction", Journal of Studies on Alcohol 39(5), p. 737-744

Miller, P.M. et al
1974 "Effects of Social Stress on Operant Drinking of Alcoholics and Social Drinkers", Behavioural Research and Therapy (May) p. 67-72

Popham, R., W. Schmidt and J. deLint
1978 "Government Control Measures to Prevent Hazardous Drinking", In: J.A. Ewing and B. Rouse (eds), Drinking. Chicago: Nelson-Hall, p. 239-266.

Room, R., and K. Beck
1974 "Survey Data on Trends in U.S. Consumption", The Drinking and Drug Practices Surveyor, 9, p. 3-7

Schmidt, W. and J. deLint
1970 "Estimating the Prevalence of Alcoholism from Alcohol Consumption and Mortality Data", Quarterly Journal on Alcohol, 31, p. 957-965

Smart, R.B.
1974 "The Effect of Licensing Restrictions During 1914-1918 on Drunkenness and Liver Cirrhosis Deaths in Britain", British Journal of Addiction to Alcohol and Other Drugs, 69, p. 109-121

Terris, M.
1967 "Epidemiology of Cirrhosis of the Liver: National Mortality Data", American Journal of Public Health, 57(12), p. 2076-2088

PREVENTION AGENDA IN THE CONTEXT OF DRINKING CULTURES

Norman Giesbrecht
Social Policy Researcher
Addiction Research Foundation
Toronto, Ontario

Paula Pranovi
Coordinator/Researcher
Children's Services Council
Windsor-Essex, Ontario

INTRODUCTION

The uses of alcoholic beverages are associated with many situations, contexts, behaviours, emotions and relationships. Companionship, relaxation, celebration, gift-giving, thirst-quenching, and a complement to meals are common uses. Alcohol consumption may also be used as medicine, to blot out unpleasant experiences or tasks, to induce sleep, to increase bravado or adjust to deviant acts, to avoid withdrawal from previous drinking, or as a means of self-punishment (see Makela, 1983). In light of the numerous and often strongly held uses of alcohol, it is clear that the interests of drinkers, and particularly of heavier drinkers, will be confronted via prevention initiatives.

In some prevention initiatives the locus of action is presented as being among alcoholic beverage producers or distributors, the government, and the agencies interested in control or health promotion initiatives. The drinker is presented as a passive vessel into which varying degrees of competing preferences or values are "poured". Or the drinker is presented as a pawn in struggles between interests promoting either increased access or greater restrictions on alcohol availability. These views are incomplete; many people entertain views and attitudes about drinking and alcohol policies which are not necessarily a derivative of alcohol promotion by the industry, or of programs to counter heavy drinking and curtail alcohol-related complications. In other words, the real life situations and everyday practices are often not taken into account, and the concrete level ignored, in policy modifications or prevention programs at the broadest levels.

In this paper we first of all offer some remarks about drinking cultures. Then we consider how conventional views on deviant and normal drinking are likely at odds with prevention agenda. Finally we offer suggestions for prevention initiatives which provide social legitimization for those interested in modifying their drinking or interested in promoting alcohol policies with a public health perspective. Our remarks are developed from research reports and aggregated data, and observations from field research in several small communities in Ontario. These

communities all have rates of alcohol sales which are above the provincial mean by at least 35%, although not as high as might be found in some primary industry or frontier towns.

An underlying theme of this paper is that a relationship exists between focussing prevention measures at the aggregate level and encouraging more individualized control of heavy drinking. While these two foci may involve different strategies or institutional mechanisms, they can be complementary and mutually reinforcing.

We suggest that prevention programs which do not take into account the drinking culture and specifically the reinforcing linkages between normal and heavy drinking are likely to be ineffective. Whether or not the modification of conventional perceptions of alcohol use and of current drinking practices is a reasonable price to pay for effective prevention is a question beyond the scope of this paper. This contentious policy issue should be addressed in local deliberations, but will ultimately be decided by the combined actions of members of the population.

REMARKS ON DRINKING CULTURES

Culture can be defined as a system of shared symbols, beliefs, practices and rituals. With regard to alcohol use, cultural patterns are conventional ways of learning to drink, and drinking traditions that are passed on from one generation to the next. "Life conditions", on the other hand, refers to functions of drinking and their relationship to social issues. The former (culture) preserves drinking styles that may in fact be out of step with modern functions. The latter (life conditions) is more quickly responsive to urbanization and other changes in the social and economic life of the society.

In a multicultural society, such as Ontario, there are likely differences in both cultural traditions and life conditions as they relate to drinking practices. In addition, tremendous variations in demographic conditions (such as economic base, population size, degree of isolation, age structure of the population and age of the community) will also have a bearing on drinking habits. Aggregate sales data indicate a wide regional variation in the per adult rate of consumption, from 7.8 to 19.3 litres per person age 15 and older by county for 1982-83 (Addiction Research Foundation, 1985).

One might speak of several drinking cultures or subcultures with differentiation by age, status, degree of involvement with alcohol, as well as by region; nevertheless, consumerism and life-style leisure patterns force a blending and mixing in many areas of social life, including alcohol consumption. Furthermore, regulatory changes via the alcohol monopoly are fairly consistent across intraprovincial jurisdictions and thus promote common views about the role of alcohol and integration of drinking into everyday activities. Mass media advertising via electronic networks and national publications, or the portrayal of alcohol in popular culture, convey thematically uniform messages, about acceptable uses of alcohol, to the various cities, towns and villages of the province.

Prevention initiatives need to take into account not only the linkages of drinking to general cultural patterns, but also to nuances in drinking practices at the local level. In the past, many of these interventions are usually directed either at the individual or at the behaviour, and may give only passing consideration to: the social support systems, the drinking networks, the uses of alcohol, or the relationship of drinking to group identity. However, drinking practices are socially organized; heavy drinking occurs not only when the drinker is alone but also in social contexts in homes, bars or restaurants. The drinker considers social relationships, status, or self-image when maintaining or altering his or her consumption, and personal risks or complications arising from drinking may in fact be of little consequence in modifying drinking.

Recent Developments in Access to Alcohol in Ontario

In Ontario alcohol regulatory arrangements appear to develop via interactions involving a number of interested institutions or pressure groups. While there is no clear policy tradition or philosophy, there have been changes in orientation. As has been the case in other western jurisdictions, there has been a steady movement from a post-prohibition orientation of control, to one of marketing and promotion of beverage alcohol (Single et al., 1981; Makela et al., 1981). It is not clear whether most, or all, changes have been demanded or even supported by the majority of the population.

Many pro-drinking fashions appear to be initiated by persons in the higher socio-economic strata, especially those regulatory changes which are intended to add sophistication and elaboration to basic drinking patterns, or even replace styles considered to be outmoded or uncivilized. Some of the modifications in access to alcohol have likely been developed to encourage tourism and are also influenced by travel experiences of local residents.

The state typically considers policy in terms of fiscal interests (particularly tax revenues), in response to pressures by the alcohol industry to condone new marketing or sale arrangements, or as a reaction to views that the method of handling alcohol in Ontario are staid and out of step with the times. (The latter view seems to be popular in the media). Costs in terms of life expectancy, morbidity, social welfare, public disruption, etc., are largely left out of deliberations; and general alcohol policy considerations are thus separated from public health issues (Brook et al., 1981).

Most Changes Favour Higher Rates of Consumption

In the last few decades there have been a number of modifications in distribution and supply of alcohol in Ontario. Almost all of them have been in the direction of facilitating access to alcohol and encouraging drinking. If one looks beyond the quantity of changes to the quality, a similar pattern is evident. One exception was the raising of the legal drinking age from 18 to 19. Ontario has experienced a decline in the real price of alcoholic beverages and an expansion of the off-premise and on-premise outlet systems. The former has increased by over 200% in three decades, and the latter by over 300% (Giesbrecht, 1984).

In off-premise or retail store outlets there has been relaxation in the hours of sale, and a transition to self-serve stores which now provide up to two thousand brands. On-premise outlets (restaurants, bars, etc.) have experienced an expansion not only in numbers but in types of licences, including sale of beer and wine in many fast food restaurants. There has also been a large increase in special occasion permits (LCBO,1970- 1985).

Concurrent with the changes outlined above, the per adult rate of alcohol consumption has increased by 59% between 1950 and 1980, although there has not been much movement in the rate in the latter part of the 1970s and early 80s (based on LCBO Annual Report data). Ontario has also experienced a substantial increase in chronic complications related to drinking, as well as acute injury and death, for example, as related to drinking and driving (Schmidt, 1977; Giesbrecht and McKenzie, 1983).

Resistance to Control Experiences

Research suggests that while, on the one hand, control measures are effective in influencing drinking behaviour, once removed, consumption rates tend to return to the pre-intervention levels. For example, when certain beverages were removed there was a shift to substitutes (Giesbrecht and Macdonald, 1981); or, when a beer strike or other types of

strikes influenced availability of alcohol, consumption rose after the strike ended (Single, 1979; Giesbrecht et al., 1982). It would appear that although some consumers might realize the benefits of moderation during periods of enforced constraint, the short interventions are not sufficient to lead to the establishment of new drinking patterns among most heavy users. On an individual level, persons who have participated in a treatment or counselling experience, and with the best intentions in the world to maintain sobriety, will likely experience considerable pressure to return to their drinking culture and drinking cohorts.

In the mix of interventions directed at alcohol problems (ranging from punishment, treatment and public education to alcohol policy), those with the narrowest target group or poorest track record often receive the widest support from the general public or interest groups. This disjunction between strategy and effectiveness is only partly due to breaks in knowledge and perception, it also entails a resistance to measures, which, while impacting heavy consumption, also have the effect of curtailing sales and moderately inconveniencing the majority of consumers.

Expansion of the Drinking Culture

In Canada a few years ago there was a "counter-advertisement" in the form of a television commercial that contained the phrase: My father drank more than my grandfather, and I drink more than my father (Dialogue on Drinking, Health and Welfare Canada). While this may not be true for everyone, the rising rates of consumption over the last few decades would suggest that many people in Ontario, and elsewhere, should be able to relate to this summation. The changes in the rate of consumption probably reflect many transformations, including generational differences in the frequency of consumption and in the integration of alcohol into social occasions.

The changes in the availability of alcohol in Ontario expose many people to drinking opportunities more often than in the past; they also provide increased social legitimization for abstainers to take up drinking. One example of this transformation is the decline in abstainers between 1950 and 1984: from 30% to 14% among males and 44% to 18% among Ontario females (Single et al., 1981; Smart and Adlaf, 1984).

Many bars and restaurants as well as special occasion permits are now oriented to young adults. The association between beverage alcohol and youth is reinforced by alcoholic beverage industry sponsorship of many sports and other entertainment events.

The increase in the rate of consumption in Ontario in the 1960s and early 1970s appears to have involved an elaboration of drinking styles and occasions (Single et al., 1981). There are currently many socially acceptable occasions to drink. In many circumstances one does not have to have a particular reason for drinking; in fact, finding socially acceptable explanations for abstinence may be more difficult. New drinking styles are typically added to traditional drinking practices rather than replacing them (Bruun et al., 1975; Makela et al., 1981); this potentially has implications in at least two directions, deflating the size of those abstaining and increasing the proportion of heavy drinkers (see Skog, 1985).

"DEVIANT" AND "NORMAL" DRINKING AND PREVENTION INITIATIVES

Conventional Views on Deviant and Normal Drinking

From the perspective of prevention initiatives, one of the key features is the distinction between "normal" and "deviant" drinking. Our experiences in small towns in Ontario suggest that the former is broadly defined and the latter identified ex post facto. Normal drinking or social drinking does not appear to have a quantitative referent. People appear to be assessed by their actions and interactions in relation to alcohol, and not primarily by the volume of alcohol they consume. Furthermore, drinking is linked to notions of personal rights, privileges and status; hard work or vigorous play deserves a reward, and drinking is a commonly acceptable form of taking and receiving rewards. The themes of "time-out", reward or relaxation which are central to many advertisements of alcoholic beverages are also commonly-heard justifications for imbibing.

However, at both the social and individuals levels there are divergent views about alcohol issues (Room, 1976). At an individual level, ambivalence was expressed by clients who were seen in the course of an alcohol educational and counselling program we offered in conjunction with a research project. Many of the clients reported that, on the one hand, "It's nobody's business how much, or little, a person drinks" but, on the other, they were well aware that their friends were likely to find them untrustworthy, or bizarre, if they did not drink.

Furthermore, personal identity is likely to be linked to drinking practices, particularly in communities with a high rate of consumption. A drinker is considered to be a buddy, an easy companion, someone who is not "straight" or "uptight". Also, beverage preferences can be seen to be tied to the individual in such phrases as: "He likes his beer" or "She's a scotch drinker".

In light of the integration of drinking with personal identity and being "normal", it is not surprising that many of the deleterious effects of alcohol that are of interest to prevention personnel may be easily dismissed by regular drinkers, and also by many other members of the community. Certain types of "drinking troubles" are accepted as normal. For example, in one community, a law enforcement official excused a young man's first, or even second, offence of driving while under the influence of alcohol with the following comment: "He was probably coming home from a stag party".

There appears to be at least two criteria for being considered a deviant drinker (that is, an alcoholic or problem drinker), by other members of the community. One involves a lapse in control of personal affairs; for example, a person who neglects work, family, household finances or friends because of drinking. Secondly, persons who have received treatment which is related to their drinking would be considered to have a drinking problem. These criteria do not include many persons who experience drinking-related personal or social complications (see Room, 1980).

The first criteria offers considerable flexibility as to what constitutes "neglect". In this context "neglect" seems to imply that alcohol has taken precedence over basic values and obligations. Since only a misguided, sick or crazy person would allow this to happen, he or she must be quite different, and therefore can be considered an alcoholic and in need of help. There is little room in this conceptual framework for a person who is not an alcoholic and has complications with alcohol which he or she should be held responsible for. For example, when we talked to local officials about rates of drinking and concomitant complications, they would refer to aggregate rates of accidents and other alcohol-related incidents. But when interventions were discussed, their point of reference would shift from the perpetrators of these incidents to the chronic alcoholic drinking alone in his or her room. It was difficult for them to accept educational or counselling interventions oriented to the occasionally heavy drinker as a legitimate means of curbing excessive consumption and its public complications; interventions were for alcoholics not regular people.

It would seem that these views of normal drinking will remain largely intact as long as the disease perspective is presented as the main explanatory paradigm with regard to alcohol problems (Room, 1983). This perspective is still the dominant one in the media, in portrayals via popular entertainment, among many agencies dealing with drinking problems, and promoted by the alcoholic beverage industries; namely, that the prime culprit, or victim, is the extremely heavy drinker who is dramatically different in motivation, habits and experiences from the vast majority who drink normally (see Makela and Room, 1985).

There are important differences among drinkers at various points in the consumption continuum. However, it is open to question whether or not accentuating the differences is the right step to effective prevention. It would seem that prevention initiatives which emphasize the differences and use them as the "raison d'etre" are incomplete, and likely misguided. Heavy drinking, including that by persons considered to be alcoholic, is, in part, a product of the drinking culture. We propose that the point of departure for prevention initiatives should be the structural arrangements influencing accessibility to alcohol and social norms and networks which facilitate heavy consumption.

PREVENTION INITIATIVES AND CONVENTIONAL DICHOTOMIES

Conventional treatment approaches reinforce a distinction between deviant and normal drinkers: however, prevention initiatives may threaten the complacency of the general population toward alcohol problems, and be viewed as disrupting general drinking practices as well. While conventional treatment programs may reassure the local population that the most deviant drinkers are being looked after, prevention programs with wider foci are required to address the uses of alcohol in the community, and the relationships among general drinking patterns, heavy consumption and compliations arising from drinking.

Prevention programs for grade school students or adolescents are probably the least threatening; what the children are taught is not seen as having a direct bearing on what adults are doing. Of course, teaching children about the risks and hazards of alcohol use may be interpreted as failure in parental instruction and guidance to the home. Once prevention initiatives address adult alcohol consumption in the form of counter-advertising in the general media, campaigns against drinking and driving, alcohol and safety programs at work, server intervention training, and so on, they are likely to be seen as intruding on "normal" and "social" drinking.

Our experience in the context of the Ontario Prevention Study we carried out in southwestern Ontario was that for the first few months there was little interest in our messages and presentations. Prevention was a novel idea to most people attending the presentations we made to social clubs and agencies. Some of the feedback we received was that we were offering a treatment program for alcoholics but just calling it something else. Also, it appears that some people did not want to acknowledge prevention messages; since this type of program was not offered elsewhere, that they knew of, a number concluded that the town was worse off than others and required special attention.

In either case the message was threatening; it was interpreted either as a call for treatment of "drunks" in the audience or community, or as an offer of special services to a town desperately in need of these services. Our message to the community groups, that prevention implied taking responsibility for drinking, ran counter to usual practices. The typical response was to tolerate, excuse, or overlook alcohol-related problems, and to let the police, hospital and social agencies handle the "fallout" from chronic heavy drinking.

A restructuring of leisure activities and social arrangements will likely be required in order to facilitate prevention. Superficial interpretation of prevention agenda is that basic patterns and habits do not have to change; people just have to learn to drink less. This view disregards the integration of drinking with many aspects of social and economic life. The heavier drinkers who participated in the counselling component of our program were quite aware of this. They realized that what they were hoping to accomplish ran contrary to existing convention; as far as they could tell there were few alternatives that would be a satisfactory substitute for drinking. They volunteered that they drank too much, but it was not clear what they would now be doing instead.

Finally it was not clear to the drinker what sort of identity he or she would have if they cut back. How would their friends relate to them? What stand should they take about drinking in general and amounts consumed by friends and acquaintances in particular? What social activities would they take part in when they were not drinking? How would they restructure their time and leisure activities? Would they feel different, isolated, rejected? Would their friends avoid them?

Prevention initiatives are a threat to "normal" drinking culture in several respects. By pointing to relationships between "usual" drinking and "deviant" drinking the functional distinctions (discussed earlier) are eroded. Also, as heavier drinkers confront their pressures and temptations to drink, this creates unease for their drinking companions. When the companions are confronted with novel behaviour of friends who once drank heavily, the companions become aware of the demands they put on others to also drink heavily.

SUGGESTIONS FOR PREVENTION INITIATIVES

Prevention initiatives need to be relevant to the dynamics of the drinking culture. Instead of focussing only on the small minority who drink very heavily, an appropriate point of departure is drinking in general and heavy drinking in particular. Many of the attitudes to alcohol use indicate tolerance of heavy consumption. The pace-setters in many drinking situations would be those who drink heavily (Skog, 1980).

Resistance to prevention initiatives will come from many quarters but particularly from individuals whose income is linked to alcohol sales. Also those who may drink heavily in private but wish to maintain a public image of respectability (and thus wish to be considered moderate consumers) will likely oppose prevention measures. Resistance may come from among those whose friends or relatives are heavier drinkers; they may be concerned that the heavier users will be singled-out and stigmatized.

New Perspectives on Drinking and Abstinence

Prevention initiatives are facilitated and supported as members of the community become aware of the personal and social hazards of heavy drinking; even among sectors of the alcohol distribution system there is increasing awareness of the complications of unchecked access. For example, pub and restaurant owners are beginning to realize that there are new complications related to encouraging or tolerating excessive drinking on their premises. The complications include not only disruptions arising from drunken customers, or from companions trying to control those who are drunk, but also the risk of large liability claims from injuries perpetrated by persons who have been served at licenced establishments. The latter is probably not widely known among drinking clientele, but through server training programs such as the one developed by the Addiction Research Foundation, the information is filtering from managers to staff to customers.

Nevertheless, in many communities, members of the population probably have only vague notions about alcohol-related incidents in their town or city, and no regular statistics are easily accessible to the community members. Some preliminary steps can be taken in many communities in order to increase awareness of drinking-related complications. For example, newspaper reports might indicate when a motor vehicle accident, or other traumatic event, involves a driver or pedestrian who was under the influence of alcohol.

Where alcohol sales statistics can be calculated by jurisdiction, as is the case for Ontario, they can be used as a tool for prevention initiatives (Giesbrecht et al., 1977; Conroy, this volume). In recent years, community consultants and researchers at the Addiction Research Foundation have promoted the use of alcohol sales data and aggregated statistics on alcohol-related complications. This information has not only been used to interpret trends and patterns, but also as background information to estimate the rate of problems in a jurisdiction (Rush et al., 1982).

Support for abstinence or moderate consumption complements raising community awareness about the rate of consumption and the levels of alcohol-related problems. Firstly, there may be misguided notions about the percentage of the population which either does not drink at all or, for example, consumers less on average than seven drinks a week. In Ontario this would constitute the majority of adults in many communities. Alcoholic beverage advertisements imply that drinking is a commonplace activity practiced by people from most walks of life in many situations; however, the current patterns appear to be different -- the proportion that drink frequently and regularly are in the minority.

Secondly, there may also be rather stilted views about abstainers or light drinkers. While older people or persons with certain religious backgrounds are over-represented among abstainers and light drinkers, these stereotypes do not reflect the hetereogenous population in these categories.

As a third step in supporting abstinence or moderate consumption, community programs need to encourage the legitimacy of individual preference. This might involve "distancing" drinking from many routine activities so that decisions not to drink will become less frequent interpersonal issues for those wishing to abstain or cut back.

Providing Mechanisms for Environmental Changes

While it is important to seek to modify perceptions and attitudes about drinking and alcohol problems in the community, it is unlikely that this will be accomplished without also taking concrete steps that impact the structural features which provide for access to alcohol and encourage drinking.

A first step in developing policies involves increasing awareness of current practices and procedures. General and local procedures for licencing the sale of alcohol, regulating selling practices and policing drinking behaviour are typically not widely known. In order to have an impact in these areas, citizens need to be better informed about the issues, and furthermore they need to realize that there are a number of avenues open to them to make alcohol policies more responsive to public health concerns. This can be done by developing mechanisms for assessing both current policy procedures and new initiatives. It is also important to have diverse representation on regulatory and enforcement bodies, including a strong representation from persons with an interest in promoting prevention agenda. Broad-based social support is obviously required in order to effectively implement the agenda of local regulatory and enforcement agencies and officials.

A wide range of issues are relevant to groups interested in planning and implementing alcohol policy. These include, for example: the volume of alcohol sales and beverage promotion techniques; criteria and mechanisms for granting or denying licences; serving practices and policing of illegal selling practices (for example, in Ontario in conjunction with special occasion permits); resources and agenda of the law enforcement agencies with regard to alcohol-related offences; and, local government activities with regard to in zoning, tourist promotion and policing as these relate to alcohol issues.

Developing a Long-Range Strategy

Finally, it is important to develop an overall strategy. This will require assessment of: drinking in general in the community, local resources for prevention initiatives, and existing biases on alcohol-related issues. It is unlikely that there is any one local issue which, if addresses, will dramatically reduce alcohol-related complications for a long time (see Holder and Blose, 1983). Also, there is probably no single intervention or technique which will do the job. Community leaders may turn (often out of desperation) to one or two interventions; for example, offering educational programs to young people or increasing attention to drinking and driving. These are notable agenda, but as we have suggested above, drinking is strongly linked to many social situations and experiences. In the long run it will not be sufficient to focus on a narrow age sector or one type of drinking-related complication.

In recent years prevention programming and research has taken on orientations that offer a strong potential for influencing drinking behaviour, rates of consumption and alcohol-related complications. Studies on the control perspective (Bruun et al., 1975; Makela et al., 1981) and the general preventative implications of the distribution of consumption model (Schmidt and Popham, 1978) are among the key underlying resources for some of these initiatives. Nevertheless, there will be the temptation to see a particular target group as the most important, or to see certain techniques, in themselves, as having the greatest potential. Of course, in any particular project or context, not all techniques can be utilized, or relevant populations or issues addressed. However, those interested in promoting prevention initiatives are advised to develop an overall strategy which includes long-range planning, while concurrently dealing with the alcohol-related incidents and issues that confront the local population from day to day. The dynamics of the local drinking culture, as well as the current arrangements for providing access to alcohol and conventional orientations to alcohol-related complications, have an important, and often overlooked, relevance to the success of prevention endeavours.

ACKNOWLEDGEMENTS

Discussions with the following colleagues who participated in the Ontario Prevention Study were relevant to the preparation of this paper: Gerry Conroy, Carol Garson, Honey Fisher, Mary Lynn Hobbs, Stephen Israelstam, Marc Lennox, Lori Millie and Sue Valentine. We also thank the clients of the Alcohol Educational and Counselling Program for their insights.

Wolfgang Schmidt's contributions to the research project from which this paper evolved are gratefully acknowledged. We thank Klaus Mäkelä and Juha Partenen for their comments on the draft and Esther Giesbrecht for editorial suggestions.

REFERENCES

Addiction Research Foundation
1984 Statistics on Alcohol and Drug Use in Canada and Other Countries, Statistics on Alcohol Use, (Volume 1). Toronto: Addiction Research Foundation

Brook, R.C., W.G. Albert, N.A. Giesbrecht, S.A. Macdonald and R.I. Simpson
1981 Response to a Policy Proposal: An Investigation into the Relationships among Rate of Off-Premise Outlets, Consumption of Alcohol and Health Damage (unpublished). Toronto: Addiction Research Foundation

Bruun, K., G. Edwards, M. Lumio, K. Mäkelä, L. Pan, R.E. Popham, R. Room, W. Schmidt, O-J Skog, P. Sulkunen and E. Österberg
1975 Alcohol Control Policies in Public Health Perspective.Vol. 25. Helsinki: Finnish Foundation for Alcohol Studes.

Giesbrecht, N., J. Brown, J. de Lint and S. Lambert
1977 "Alcohol Problems in Northwestern Ontario - Preliminary Report: Consumption Patterns, and Public Order and Public Health Problems", Substudy No. 872, Toronto: Addiction Research Foundation

Giesbrecht, N. and S. Macdonald
1981 "A Ban on Fortified Wine in Northwestern Ontario and Its Impact on the Consumption Level and Drinking Patterns", British Journal of Addiction, 76, p. 281-286

Giesbrecht, N., G. Markle and S. Macdonald
1982 "The 1978-79 INCO Workers Strike in the Sudbury Basin and Its Impact on Alcohol Consumption and Drinking Patterns", Journal of Public Health Policy, 3, p. 22-38

Giesbrecht, N. and D. McKenzie
1983 "Trends in Public Health and Public Order Consequences of Alcohol Consumption in Ontario, 1950-1980", In: N. Giesbrecht, M. Cahannes, J. Moskalewicz, E. Osterberg and R. Room (eds.), Consequences of Drinking: Trends in Alcohol Problem Statistics in Seven Countries. Toronto: Addiction Research Foundation

Giesbrecht, N.
1984 "An Overview of Research and Policy with Regard to the Control Perspective on Alcohol Problems: A Canadian Perspective", In: H.D. Holder and J.B. Hallan (eds.), Control Issues in Alcohol Abuse Prevention: State and Local Designs for the '80s. Columbia: S.C.: South Carolina Commission on Alcoholism and Drug Abuse

Holder, H.D. and J.O. Blose
1983 Reduction of Community Alcohol Problems: A Community Simulation of Wake County, North Carolina, Washington County, Vermont, and Alameda County, California. Report by the Human Ecology Institute, Chapel Hill, NC

Liquor Control Board of Ontario
1970-85 Annual Reports. Toronto: Government of Ontario

Liquor Control Board of Ontario
1985 Personal Communication with Staff

Mäkelä, K., R. Room, E. Single, P. Sulkunen, B. Walsh with R. Bunce, M. Cahannes, T. Cameron, N. Giesbrecht, J. de Lint, H. Makinen, P. Morgan, J. Mosher, J. Moskalewicz, R. Muller, E. Österberg, I. Wald and D. Walsh
1981 Alcohol Society, and the State, Volume 1: A Comparative Study of Alcohol Control. Toronto: Addiction Research Foundation

Mäkelä, K.
1983 "The Uses of Alcohol and Their Cultural Regulation", Acta Sociologica, 26(1), p. 21-31

Mäkelä, K. and R. Room
1985 "Alcohol Policy and the Rights of the Drunkard", Alcoholism: Clinical and Experimental Research 9(1), p. 2-5

Room, R.
1976 "Ambivalence as a Sociological Explanation: The Case of Cultural Explanations of Alcohol Problems", American Sociological Review, 42, p. 1047-1065

Room, R.
1980 "Treatment-seeking Populations and Larger Realities", In: G. Edwards and M. Grant (eds.), Alcoholism Treatment in Transition. London: Croom Helm

Room, R.
1983 "Sociological Aspects of the Disease Concept of Alcoholism" In: R.G. Smart, F.G. Glaser, Y. Israel, H. Kalant, R.E. Popham and W. Schmidt (eds.), Research Advances in Alcohol and Drug Problems, Volume 7. New York: Plenum Publishing Corp.

Rush, B., S. Macdonald and N. Giesbrecht
1982 Estimating the Number of Alcoholics in Ontario: An Analysis by County. Working Paper Series. Toronto: Addiction Research Foundation

Schmidt, W.
1977 "Cirrhosis and Alcohol Consumption: An Epidemiological Perspective", In: G. Edwards and M. Grant (eds.), Alcoholism: New Knowledge and New Responses. London: Croom Helm

Schmidt, W. and R.E. Popham
1978 "The Single Distribution Theory of Alcohol Consumption: A Rejoinder to the Critique of Parker and Harman", Journal of Studies on Alcohol, 39, p. 400-419

Single, E.W.
1979 "The Substitution Hypothesis Reconsidered: A Research Note Concerning the Ontario Beer Strikes in 1958 and 1968", Journal of Studies on Alcohol, 40, p. 485-491

Single, E.W., N. Giesbrecht and B. Eakins
1981 "The Alcohol Policy Debate in Ontario". In: E.W. Single, P. Morgan, and J. de Lint (eds.), Alcohol, Society and the State, Volume II: The Social History of Control in Seven Countries. Toronto: Addiction Research Foundation

Skog, O-J
1980 "Social Interaction and the Distribution of Consumption", Journal of Drug Issues, 10, p. 71-92

Smart, R.G. and E.M. Adlaf
1984 "Alcohol and Drug Use Among Ontario Adults in 1984 and Changes since 1982", (unpublished report). Toronto: Addiction Research Foundation

PUBLIC PERCEPTIONS ON KEY ALCOHOL RELATED POLICY ISSUES

Jim Anderson
Program Officer
Health Promotion Directorate
Health and Welfare Canada
Ottawa, Ontario

INTRODUCTION

Depending on public perceptions of particular alcohol-related issues, regulatory measures to control alcohol availability and alcohol-related health promotion programs will be differentially acceptable to people in the community, and their effectiveness will vary accordingly. Admittedly, alcohol control policy measures can be both provincial and national in scope but the people at the community level need to understand the rationale and intent of such policy and their support for it must be cultivated and gained. Conversely, alcohol-related health promotion programs originating at any level of government must be owned and supported at the community level if they are to have a positive effect. Thus, knowing how the public perceives the issues and what needs to be done about them are necessary precursors to the introduction of any regulatory measures or prevention program initiative.

In terms of separate or simultaneous control and program initiatives at national, provincial or community levels, three areas of public perception assume major significance and importance. These areas which especially warrant prior investigation are as follows:

: The nature of the felt social obligation to serve alcohol and a roughly consensual point of view among regular drinkers as to what constitutes socially acceptable drinking behaviour

: The general reaction to the concept of regulatory measures designed to control alcohol availability and decrease consumption levels

: What is seen as appropriate government involvement in alcohol related health promotion program initiatives

THE SOCIAL OBLIGATION TO SERVE ALCOHOL AND ACCEPTABLE DRINKING BEHAVIOUR

In most societies, drinking is essentially a social act which is interwoven into the fabric of the socio-cultural milieu. More specifically, in nations where the regular use of alcohol is widespread, it assumes a recognized place in promoting integration and in facilitating social solidarity. Alcohol is valued because it is perceived as having a useful and significant place in the overall functioning of society. In specific terms, the host's role dictates that alcohol will be served to a guest and, when the roles are reversed, the former guest has a social obligation to reciprocate.

A study conducted by a group of American researchers (Rabow et al, 1982), found that a host's felt obligation to serve alcohol was a more compelling consideration than other factors such as price or the proximity of an outlet where liquor could be purchased. While this finding cannot be generalized to a Canadian sub-population, the strength of this social obligation factor needs more investigation prior to assuming confidently that manipulation of price and decreasing the number of available outlets would lead to an overall decrease in alcohol use. Clearly, it is at the level of the community that this kind of inquiry must be made because it is in this setting that the social interaction referred to takes place.

There are distinct ambiguities in what the public perceives as acceptable drinking behaviour. Thus, for example, about 75% of Canadians approve of random breath tests to detect drinking drivers and tougher sentences for impaired driving offenders (Gallup Poll of Canada, July 15, 1981). In terms of the legal limit, this means that they disapprove of persons drinking and driving after four or five drinks. By contrast, while most people disapprove of drunkenness, they are much more leniently disposed to people who get high but not really drunk. In a social context, the frequency with which people consume in excess of four or five drinks when they get "high" and the probability that they will drive home afterwards seems to escape the awareness of many people. Clearly, we need to know more about the intricacies of public perceptions, particularly when they seem to be somewhat contradictory or clouded about what constitutes acceptable drinking behaviour.

REGULATORY MEASURES RELATED TO ALCOHOL PRICE AND AVAILABILITY

Many people are of the opinion that moderate amounts of alcohol produce beneficial effects, in that it serves as a social lubricant and produces a sense of well-being. Others feel that they need to drink in order to meet the demanding expectations which are placed upon them as a result of their work and social obligations. The stance which they adopt

does not admit of experiencing any detrimental consequences due to alcohol use. Further, it is evident that, in a vague but effective way, the disease concept of alcoholism (Watts, 1981) has had a significant impact on public thinking and perceptions. In the minds of many people, there is a dichotomy between alcohol dependent persons with problems vis-a-vis non dependent drinkers who are perceived as problem free. It is probable that people who share this perspective will not be favourably disposed to regulatory measures which control the price and availability of alcohol. The rationale for this opposition might be as follows: the real concern should be for alcohol dependent problem individuals; in which case, why penalize the majority of people who have no problem with alcohol use by imposing restrictions which make it more difficult and costly to obtain? From this type of response it becomes obvious that we need to know more about how the public perceives alcohol problems in terms of their respective individual and social or environmental aspects.

In the post war era, the alcohol industry has enjoyed a valuable and unearned benefit through the widespread dissemination and acceptance of the disease concept of alcoholism. From this perspective, the problem rests with the individual and not with alcohol per se, and so the way is left open for alcohol production and marketing to be viewed as a socially acceptable and legitimate commercial pursuit. The alcohol industry has assumed a position of respectability in the minds of many. In addition, it has attained a good corporate image, particularly with regard to its high visibility as a major supporter of a wide range of sporting and recreational events. In a recent poll commissioned by Canadian distillers, 69% of those contacted supported the view of the industry that the cost of beverage alcohol in Canada was already too high. The only cloud on the horizon for the Canadian alcohol industry is the indication from a 1981 national survey that about one-half of the respondents favoured banning all alcohol advertising.

Controls on alcohol availability and price will inevitably have a negative impact on the alcohol industry. If this industry were to be seen as contributing significantly to alcohol problems, public support for such measures would be enhanced and their negative impact on the industry would likely be ignored. Conversely, if the industry is seen as being somewhat neutral in terms of its contribution to the alcohol problem, this impact might be seen as unnecessary and even unjust. Indeed, if the industry were to publicize the loss to the Canadian economy attributable to the imposition of controls, many people might be supportive of the industry's strong opposition to their introduction. On the basis of the foregoing observations, it would be very useful to gain specific insights into how the alcohol industry is perceived by people at the community level.

THE FORM WHICH GOVERNMENT PREVENTION PROGRAMMING SHOULD TAKE

In terms of some of the problematic consequences of alcohol use, many people see government as most appropriately involved in the introduction of legislation to control a particular behaviour or practice. For example, many people are concerned about the nature and extent of drinking among adolescents. Thus, in terms of a specific legislative measure, 62% of respondents in a 1983 national survey (Addiction Research Foundation of Ontario, 1984) favoured raising the legal drinking age to 21. Apart from legislation, we do not have much specific information about how people regard government based program interventions designed to prevent alcohol problems. Probably the best explanation for this knowledge gap is that the question has never been explicitly posed to the public; possibly because as programmers we feared what the response might be. One of the few clearer indications that we do have is from a 1981 national survey (Addiction Research Foundation of Ontario, 1984) which showed that 66% of those contacted favoured an increase in government advertising on the risks attributable to alcohol use.

In a number of Canadian provinces, a comprehensive alcohol and drug education program has been introduced into the school system through a coordinated effort on the part of the provincial addictions agency and ministry or department of education. On the whole, the expressed public perceptions of these programs have been very favourable. It is possible that this response stems from the same kind of public concern about adolescent drinking which has generated some support for an increase in the legal drinking age. In any event, we need to gain a perspective on public expectations for such programming and how realistic these expectations are.

In general terms, governments at all levels which become involved in alcohol-related health promotion programs need to have some clear indication about how the public regards these kinds of interventions. Clearly, if the public perceives such involvements as inappropriate or unproductive, there is little chance that they will have a positive impact or the desired effect. This observation suggests a number of questions which could and should be asked with a view to ascertaining if the public is "on side" in relation to the programming which government is proposing. For instance:

: do people understand the program approach which is being taken?

: are most people in favour of a different type of program approach?

: are people indicating that they are disaffected or unconcerned because they have not been consulted about what should be done about the problem?

: in fact, are most people skeptical about the sincerity of the intent of government-sponsored programs believing that government relies on revenue generated from alcohol sales?

All these questions need to be investigated before we proceed with programming; otherwise, what we do may lack the essential and required public support.

In summary, we would be well advised to take a page out of the book of good market researchers by knowing beforehand what various target groups will respond to, and what will sell. Thus, it becomes of critical importance to have prior knowledge of public perceptions on specific alcohol-related issues before introducing programming or regulatory measures. This information must be sought from people at the community level because they are the ones who will support or oppose or simply ignore such government interventions. Only by obtaining and considering public perceptions carefully can we avoid efforts which are counterproductive, create misunderstandings, arouse opposition or even compromise what could be done effectively in the future.

REFERENCES

Addiction Research Foundation of Ontario
1984 Statistics on Alcohol and Drug Use in Canada and Other Countries, Vol. 1. Toronto: Addiction Research Foundation

Caliguri, J.P.
1978 "Servicing the People on Alcohol/Drug Policies and Programs in Public Education", Journal of Psychedelic Drugs, 10(2), p. 151-156

Glassner, B.
1981 "Irish Bars and Jewish Living Rooms: Differences in Ethnic Drinking Habits", Alcoholism/The National Magazine, 2, article #85, p. 19-21

Rabow, J., et al
1982 "Social Psychological Dimensions of Alcohol Availability: The Relationship of Perceived Social Obligations, Price Considerations, and Energy Expended to the Frequency, Amount, and Type of Alcoholic Beverage Consumed", The International Journal of the Addictions, 17(8), p. 1259-1271

Wallack, L.
1984 "Practical Issues, Ethical Concerns and Future Directions in the Prevention of Alcohol-Related Problems", Journal of Primary Prevention, 4(4), p. 199-223

Watts, T.D.
1981 "The Uneasy Triumph of a Concept: The 'Disease' Conception of Alcoholism", Journal of Drug Issues, (Fall), p. 451-460

Wiesner, C.L.
1981 The Politics of Alcoholism: Building an Arena Around a Social Problem. New Brunswick, N.J.: Transaction Books

Worden, M.
1979 "Popular and Unpopular Prevention", Journal of Drug Issues, (Summer), p.425-433

World Health Organization
1982 Background document for reference and use at the Technical Discussions on Alcohol Consumption and Alcohol-Related Problems: Development of National Policies and Programmes, Geneva, WHO, A/35 Technical Discussions/1, March 9

DEVELOPING A CONSENSUS WITHIN A COMMUNITY TO CONTROL THE ABUSE OF ALCOHOL

Gerry Conroy
Projects Coordinator
Drinking-Driving Counter-Measures
Ministry of the Attorney-General
Toronto, Ontario

CAVEAT LECTOR

In this paper, several ideas are put forward about approaching a community with the avowed purpose of helping curb dangerous drinking levels. Some of these ideas have been tried successfully, others are controversial and should be tried with caution. There is always the possibility of causing a backlash against any moderate drinking campaign, especially if negative media attention is focused on the town (Klausner and Foulks, 1982).

THE COMMUNITY PROFILE FOR A SUCCESSFUL INTERVENTION

There are three approaches social programmers may take in helping with alcohol-related problems. First, they might seek out a community with a very visible problem with alcohol and offer their services. Secondly, they might wait for an invitation from someone living in a community with alcohol-related problems to help solve those problems. Thirdly, they might seek out a community with no alcohol-related problems and help that rare town stay a moderate-drinking example for other less fortunate places.

There are, no doubt, good reasons to back any choice from these alternatives. However, the success of any campaign against high alcohol consumption will depend in large measure on whether the chosen town fits the following five criteria:

1. the town's population has a high rate of consumption of alcohol;

2. the community's political leaders are in favour of effective action and are willing to pay for program development;

3. the townspeople have experienced a series of shocking events involving alcohol, such as teenage deaths;

4. the community's social and legal professionals are in favour of effective action;

5. an alcohol and drug awareness committee exists or could be formed.

If any of these puzzle-pieces are missing, the likelihood of a successful intervention is reduced. There are, of course, specific situations which might require the programmer to revise this list. For example, the community chosen might pass all five tests but pass the first test too well. If the town has a drinking rate so high as to make sobriety a rare event, then it will likely not be possible to help the townspeople reach a consensus to control alcohol abuse. Nevertheless, this list is a useful one to begin the process of finding towns which will successfully attain a goal of moderate social drinking.

The first criterion on any list is always the rate of consumption of alcohol in the community. Some care should be taken to assess this rate accurately. If, as in Ontario, access to alcohol sales figures are available on an outlet basis, then data can be gathered for just the town. Sales data should be aggregated for yearly totals over a period of several years and a trend line established. To establish comparable rates, the per capita rate can be computed as can the per drinker rate using the population fifteen years of age and over multiplied by the percentage of drinkers, as estimated from survey results.

In order to assess whether a town is drinking at dangerous levels, at high levels, at moderate or low levels, a bit of theory must be indulged. The distribution of consumption model is a useful technique for determining the number of drinkers above any given level of drinking. From the literature, it is known that people drinking at levels of eight standard drinks or more per day face a higher risk of liver cirrhosis (Lelbach, 1975). It is also known that people drinking more than four drinks more than three times per week face an increased risk of social problems (Sanchez-Craig and Israel, 1985). These two marks can be established as thresholds of social and medical disruption. R.I. Simpson and B. Rush (1985) have provided us with a handy manual for computing the distribution of drinkers at each level from one to eight and above standard drinks per day for rates of yearly consumption from 9 litres of absolute alcohol to 28.9 litres. Using their work and erring on the side of permissiveness, it would seem that 9.5 litres of absolute alcohol per drinker per year would be the maximum rate one could justify in trade for the benefits alcohol provides. Even at this, one out of five drinkers will be at increased risk for social or health problems.

If 9.5 litres of absolute alcohol is arguably the upper limit of "safe" drinking, what is the limit between advanced risk drinking and hazardous drinking? Turning again to Simpson and Rush (1980, p. 80), one sees that at 14.4 litres of absolute alcohol, two out of three drinkers will be drinking "safely", while a full one-third of the drinking population will be at increased risk of social and health problems. This seems an unreasonably large percentage of people with risk of problems, enough to warrant the label of hazardous. Table 1 shows where some small Ontario towns fit in this continuum.

In computing the average level of consumption of alcohol in any town, then, the rate of abstainers (about 13-18% of the population in small town Ontario), the population by age and the sales of absolute alcohol by year must be known.

If money and time are available, more careful estimates can be made by finding the trading area of local outlets of alcohol through consumer surveys. The data provided in Table 2 are computed using a standard 15% rate for abstainers and no trading area information. A perusal of Table 2 shows that as the drinking rate increases a smaller town may have more problem drinkers than a larger town. For example, Kincardine may have more than twice the number of drinkers at risk of health problems than Paris, although Paris may have about 30% more drinking people. These figures have to be taken with caution of course, since the number of problem drinkers in a town can only be known with certainty after surveys give data on average length of time of heavy drinking in the town's population. Such surveys might show that Kincardine is a town of predominantly young people drinking heavily for three years on average while people in Paris might be distributed more equitably across all age groups with all drinking types. If this were true, it could mean that Paris would have more people at risk of health problems of a chronic nature, such as cirrhosis, while Kincardine might have more people at risk of acute health problems such as accidents. These speculations can only be confirmed by careful study of each town. Table 2, then, does not show definitively the actual number of people at risk in each town, but it can serve as a rough guide for programming purposes.

The second and third points are linked together, inasmuch as the willingness of the community's leaders to seek assistance and pay for it is spurred on by the recent occurrence of drinking-related tragedies. Shocking events have greatest impact when perceived by townspeople as extraordinary events calling for remedial action before they become ordinary occurrences. In one small Ontario town, for example, the mayor was dismayed when several teenagers died in a drinking-related car accident followed the next week by a young man's death from alcoholic

TABLE 1

SOME SMALL ONTARIO TOWNS GROUPED BY PER DRINKER RATES OF SALES OF ALCOHOL

TOWNS BY GROUP	1981 POPULATION 15 +	ESTIMATED 1981 DRINKER POPULATION	ESTIMATED 1981 PER DRINKER SALES IN LITRES OF ABSOLUTE ALCOHOL
UNDER 9.5 LAA:			
Unknown			
BETWEEN 9.5 AND 14.4 LAA:			
STONEY CREEK	27,882	23,700	10.9
HANOVER	5,051	4,295	13.1
OVER 14.4 LAA:			
PARIS	5,760	4,895	15.8
INGERSOLL	6,539	5,560	16.4
TILLSONBURG	8,347	7,095	18.0
STRATHROY	6,608	5,615	19.4
RENFREW	6,788	5,770	22.7
GODERICH	5,737	4,875	23.6
BRADFORD	5,245	4,460	24.6
PERTH	4,625	3,930	32.3
KINCARDINE	4,135	3,515	34.5

Sources: These data were compiled from material supplied by Brewers Retail, operated by Brewers Warehousing Company Limited and the Liquor Control Board of Ontario. Estimated population figures were taken from Statistics Canada Catalogue 95-904.

TABLE 2

ESTIMATED NUMBER OF PROBLEM DRINKERS IN SOME SMALL ONTARIO TOWNS

TOWNS BY GROUP	ESTIMATED NUMBER OF DRINKERS AT INCREASED RISK OF SOCIAL PROBLEMS	ESTIMATED NUMBER OF DRINKERS AT INCREASED RISK OF CHRONIC HEALTH PROBLEMS
UNDER 9.5 LAA:		
Unknown		
BETWEEN 9.5 AND 14.4 LAA:		
STONEY CREEK	5,615	2,380
HANOVER	1,285	560
OVER 14.4 LAA:		
PARIS	1,855	830
INGERSOLL	2,200	995
TILLSONBURG	3,140	1,455
STRATHROY	2,710	1,285
RENFREW	3,310	1,660
GODERICH	2,910	1,485
BRADFORD	2,765	1,440
PERTH	3,090	1,910
KINCARDINE	2,900	1,860

Sources: These estimates were made from data compiled from material supplied by Brewers Retail, operated by Brewers Warehousing Company Limited and the Liquor Control Board of Ontario. Estimated population figures were taken from Statistics Canada Catalogue 95-904.

poisoning and a town official's arrest for driving while impaired. None of these events could be ignored as being ordinary. They came too close together, and caused the mayor to worry that alcohol-related tragedy was becoming commonplace and this caused him to seek remedy.

It is appropriate for a community to pay for any part of the intervention it can afford. It might provide office space, data collection, surveys and whatever promotional assistance it can give. If help is requested by a town, some self-support ought to be forthcoming so that people in the community can feel that any action taken is from their own initiative.

The fourth and fifth points are less important, but still indicative of how successful an intervention is likely to be.

When a town meets these criteria, programmers have a better chance of helping lower the level of consumption in town and thus lessening the social and health burdens carried by the community.

SCHEMA FOR DEVELOPING CONSENSUS

Once a community has been chosen, an action plan should be drawn up. Naturally, the programmers will try to form liaisons with key people in the community.

Much has been written on the subject of community development strategies. Wallack's experiences are a useful reference, particularly regarding the importance of the roles various people must play in building a consensus. Time and patience spent in identifying supporters and opponents will be rewarded later in program development.

It might be useful to break this task into two parts, the first being committee development and the second being direct action with the townspeople.

Committee Work

There are five stages to follow in the committee stage of the programming.

1. Form an alcohol awareness committee composed of useful and influential community members (Wallack, 1984-85).

2. Run seminars for the committee explaining control, availability, and public health perspective issues (Wallack, 1984-85; Popham et al, 1984).

3. Discover through the committee the behaviour of the community leading to high alcohol consumption.

4. Use the distribution of consumption model to show the number of problem drinkers in the town given its population and average consumption (Simpson and Rush, 1985).

5. Debate the level of consumption desirable and, when consensus is reached, establish this as the goal for the community.

The third step in this process is the most crucial. Once the committee members discover for themselves the social activities that lead to high consumption levels, they will find appropriate ways to curb those activities while encouraging dry alternatives. One thinks of the example of Ron Douglas' work in Thunder Bay (Murray et al, 1984) and the Prevention Research Center's work in San Francisco (Wallack, 1979). The problems that might become evident are too many outlets, cut-price sales of drinks, excessive advertising, official sanctioning of alcoholic events such as Oktoberfest festials, inadequate policing allowing public or under-age drinking or boot-legging, or perhaps just a pervasive wet attitude. No doubt other problems might surface once the committee starts to gather information.

The fifth step, reaching consensus, is the most difficult. The committee may need help to see what constitutes "safe drinking", from a number of perspectives. For many people, even one person suffering a preventable misery is not acceptable. Others may be willing to balance one person's misery against another person's pleasure. Nevertheless, committee members should agree that drinking above 9.5 litres of absolute alcohol per person per year is not acceptable. If the current level of drinking is 20 litres of absolute alcohol per person per year, then the debate should lead to a goal of less than 9.5 litres, with a gradual reduction spread over several years. The first year's goal could be to reduce to 18 litres, the second year 16 litres and so on.

Giesbrecht and Conroy have advocated the creation of an office to help gather data and promote the committee's wishes. If the committee agrees, this would be a reasonably sound way to keep the issue alive.

This office could provide community survey data, refinement of consumption level data, some help in monitoring infractions of laws regarding alcoholic beverages and some educational and promotional activities.

Recommended Direct Action

To begin the task of reducing the average level of alcohol consumption of the townspeople, I would recommend five further stages.

1. Start an educational campaign for the community similar to that used in step 2 of the committee work, to increase awareness of the issues.

2. Start a control policy in the town.

3. Offer programs for people who want to reduce or stop drinking.

4. Monitor the town's consumption level and publish it on a monthly basis for the preceding year.

5. Begin developing social activities that revolve around abstinence.

The first of the committee's direct actions ought to be to make a presentation to town council and then publish its report and recommendations in the local press. Pamphlets could be distributed proclaiming the committee's belief that a reduction in average drinking levels is required and showing how this would benefit everyone. A form poster could be designed with the idea of posting the last twelve months' drinking level and the percentage increase or decrease from the previous month. A series of newspaper articles could describe the seasonal fluctuation in drinking in town with an explanation of how to moderate the pattern, for example, by purchasing less alcohol for consumption at Christmas and New Year's. In general, methods appropriate for each town may be devised to bring home the message of moderating currently unsafe drinking levels.

A control policy should be the committee's next direct action after the educational program has begun. Here, the committee initiates steps to control the availability of alcohol in situations which lead to over-consumption. This control policy should be directed at specific areas of concern, as may be required in the community. For example, the committee may find that special occasion permits are being handed out so frequently as to warrant a name change to "ordinary occasion permits". Furthermore, these permits may be given out to any service club without ensuring that servers of alcohol in the clubs have had proper server training. The committee may wish to recommend legislation against this practice, along with an approved servers' training program.

Other areas of control will present themselves as the committee explores its town's particular drinking-related problems. For example, police regulation can help a control policy be effective. Police may be instructed to apply existing law enforcement procedures rigorously in enforcing breaches of laws concerning alcohol.

But in any town, an educational and counselling program will be found beneficial. Providing a dry atmosphere for heavy drinkers or recovering alcoholics is a cost-effective measure that prevention-oriented programmers should take. The goal of such a program should be to inform the populace about the likely health and social risks of drinking in certain dose-specific ways. The program should offer group or individual counselling to keep drinking at a personally acceptable level (Giesbrecht et al, 1984). By developing a community education program which includes specific messages such as drinking more than four drinks per occasion or more than three times per week is likely to lead to social problems, or such as an average of four drinks per day or more leads to elevated health risks, anti-drinking messages can be made more effective than vague public service announcements such as "Don't Drink and Drive".

One of the prime functions for a local office is to gather data and report them to the committee. These data might show, for instance, the monthly consumption rate for the town and provide a monthly message to the townspeople about progress or relapse on the road to moderate drinking. Other data which might be gathered include absentee rates from local factories; hospital separation rates for all causes as well as alcohol causes; arrests and citations for all crimes as well as alcohol-related crimes and so on. In addition, some yearly figures for the economic health of the community should be generated, to show citizens how a moderate rate of drinking improves their financial worth. It is likely that a community could attract or keep industry with such a health-oriented program.

The final stage in direct community action is the creation of, or greater support for, social activities which preclude alcohol use. No matter what activity is started, or expanded, the social events surrounding that activity should be alcohol-free. The establishment of such policies, although problematic at first, will set the tone for the citizenry, making drinking an increasingly rare event in the social life of the community.

Although specific problems require ingenuity and patience, perhaps the general rule should be first to instruct people about their own drinking behaviour and then give them good reasons for modifying it. Finally, they should be shown how to change it.

REFERENCES

Giesbrecht, N., S. Valentine, I. Israelstam, and C. Garson
1984 "An Alcohol Education Programme for Moderate to Heavy Drinkers: Promotional Approaches, Client Characteristics, Programme Techniques and Interim Assessment". Presented at the Canadian Addictions Foundation Conference, Halifax, Nova Scotia, April 29-May 3

Giesbrecht, N. and G. Conroy
forth-coming "Options in Developing Community Action Against Alcohol Problems". In: Holder, H. (ed.), Proceedings of the Control Issues in Alcohol Abuse Prevention II: Strategies for States and Communities. Greenwich, CT: JAI Press, Inc.

Klausner, S.Z. and E.F. Foulks
1982 Eskimo Capitalists, Oil, Politics and Alcohol. New Jersey: Allanheld, Osmun and Co.

Lelbach, W.K.
1975 "Quantitative Aspects of Drinking in Alcoholic Liver Cirrhosis", Alcoholic Liver Pathology. Toronto: Addiction Research Foundation, p. 1-18

Murray, G., M. Thomson, and R.A. Douglas
1984 "Municipal Government Intervention in Alcohol Policy: A Working Model", Recreation Research Review,(March), p. 28-34

Popham, R.E., W. Schmidt and S. Israelstam
1984 "Heavy Alcohol Consumption and Physical Health Problems". In: Smart, R.B. et al. (eds.), Research Advances in Alcohol and Drug Problems, Vol. 8. New York: Plenum Press, p. 149-182

Sanchez-Craig, M. and Y. Israel
1985 "Patterns of Alcohol Use Associated with Self-Identified Problem Drinking", American Journal of Public Health, 75(2), p. 178-180

Simpson, R.I. and B. Rush
1985 A Programmer's Guide to Alcohol Consumption Statistics. ARF Internal Document No. 57. Toronto: Addiction Research Foundation

Wallack, L.
1979 The California Prevention Demonstration Program Evaluation: Description, Method and Findings. Berkeley: Social Research Group

Wallack, L.
1984-1985 "A Community Approach to the Prevention of Alcohol-Related Problems: The San Francisco Experience". International Quarterly of Community Health Education, 5(2), p. 85-102

BUILDING CONSTITUENCIES FOR PREVENTION OF ALCOHOL PROBLEMS

Robert I. Reynolds
Chief, Alcohol Program
Department of Health Services
San Diego, California

Thank you for your invitation to visit Ontario and to meet with you. I confess I feel somewhat like a pilgrim in Mecca. For the past decade and a half I have been reading Addiction Research Foundation publications and fantasizing about what things are really like in Ontario. After meeting participants in this conference I am very impressed with the integration of Addiction Research Foundation prevention research and your actual hands-on activities. I look forward to applying your knowledge and experience in my community, San Diego County, California.

First, I commend to you the Ron Douglas paper presented earlier which focusses on the issues of marketing. Marketing prevention is really the issue I am addressing, and I believe that the Douglas paper is very helpful and on target. As I discuss the individual groups which together constitute a comprehensive prevention advocacy community, please remember that each individual group requires a clear marketing strategy for recruitment and retention. The themes which attract professional groups and those which attract lay volunteers are very different. Both groups must work at maintaining each group's sense of importance and contribution.

INFLUENCE OF WESTERN THINKING

Often in working with constituency groups, I observe alcohol program staff trying to help each individual group understand the role and function of each other participating group. As part of our Western training we seem somehow to insist that the whole is the sum of its parts, and that things just work better if everyone understands the "Big Picture". I'm no longer certain of this. It seems to me now that much of the time we spend "integrating" and "coordinating" community prevention constituencies really prevents our "doing" prevention. In prevention especially I believe that efforts are synergistic and larger than the sum of the parts.

While I believe that the unimodal theory of alcohol problem distribution and the public health view of prevention are important and helpful to me as a professional administrator, I'm not so certain that this information is very helpful to me as a community organizer. I just haven't experienced local Kiwanis clubs or church groups becoming highly motivated following a discussion of agent, host, and environment! Such information is nice, but not very energizing. In organizing prevention constituencies, we should leave our theories at home and respond instead to the interests of our audience. Let me illustrate my point with those who potentially constitute the prevention constituency.

Recovering Persons

Conveying our message about prevention to local constituency groups is seldom easy, even when we focus on those we believe should be a "natural" constituency for support. Let's take, for instance, recovering alcoholics. Who should have a higher interest in prevention? However, the response to prevention efforts by recovering persons is often one of disinterest, and even opposition.

In the States, at least, most recovering persons are active in Alcoholics Anonymous. As such, these individuals often accept the disease (bi-modal) model of alcoholism as the explanation of all community alcohol problems. Recovering persons commonly accept the bi-modal view of alcohol problems --- most people can drink alcohol without experiencing any problems; only a few (alcoholics) develop drinking problems. It takes some effort, and diplomacy, to convey that different ways of thinking do not necessarily require a rejection of the disease model.

In recruiting recovering individuals as prevention advocates I believe it is helpful to direct attention to alcohol problems other than those which fit the disease model. For instance, either consciously or subconsciously, recovering persons are likely to believe that drinking/driving problems are caused primarily by alcoholics. They are unfamiliar with studies, such as our San Diego Study (Ryan and Segars, 1983), which show that fewer than 20% of those arrested for a first time drinking/driving offence are characterized as "problem drinkers". When I explain that the "typical" convicted drinking driver in San Diego County is in his late twenties and was arrested after drinking with friends in a public place on a special occasion, and that this was not his normal drinking experience, then recovering persons begin to understand that issues of price, place, and promotion may have a role in reducing alcohol problems. This understanding, most importantly, does not require a rejection of the disease model, or a complete understanding of unimodal problem distribution theory.

Alcohol Professionals

A second traditional alcohol constituency group too seldom supportive of prevention initiatives is the alcohol professional, often employed in a clinic or hospital based program. In addition to general acceptance of the disease model, these individuals are economically committed to treatment. While there is financial reward in treatment, and today even in intervention, as yet there is no profit in prevention.

Lacking a theoretical or vested interest in prevention, alcohol treatment professionals can be hard to sell as prevention advocates. As alcohol professionals, however, professional pride does provide opportunities for recruitment. Much of alcohol problem prevention theory is new, and the opportunity to gain new knowledge is attractive to professionals. Professionals love to be on the forefront and this fact creates a marvelous marketing strategy for our approach to alcoholism treatment professionals.

Prevention advocates should also recruit treatment professionals based on the self-interests of these professionals. For instance, program treatment staff may not be interested in prevention issues generally, but they do have a vested interest in creating a community environment in which clients may go to a restaurant for dinner without being badgered to order a drink. Within this context, treatment professionals will support a prevention campaign promoting "It's OK Not to Drink" and specific efforts to create establishment policies and server training programs which recognize and market to individual choice.

New Community Groups

New community groups have recently begun to focus on alcohol problems. One of the most important of these is Mothers Against Drunk Drivers, or MADD. I had the opportunity of working with leaders of MADD in the early stages of that group's successful efforts, through legislative lobbying, in effecting major changes in the California drinking/driving laws. I view the development of MADD as very positive as it focussed public attention and concern on the tragedy of drinking/driving.

From a prevention perspective, however, MADD may be difficult to work with because the organization, naturally, is more victim oriented than prevention oriented. For those who have suffered a tragic loss due to an individual act, it is natural to generalize that alcohol problems are the result of collective individual acts and to fail to recognize the societal norms which encourage such acts. The loss of a spouse due to the

act of an alcoholic often leads to the view that all drinking driver problems are caused by alcoholics. This view of course does not foster examination of the relationship of alcohol distribution and transportation systems which might better explain why the drinker was driving in the first place.

Until recently, MADD subscribed basically to the bi-modal distribution of consumption model -- most people can use alcohol without difficulty, but a few drinkers (alcoholics) create problems. In this regard, MADD shared the viewpoint, and financial support, of the alcoholic beverage industry. Today, this is changing.

At both the national and local chapter levels, MADD is becoming more sophisticated and responding to research, like the San Diego County study on first offenders, by broadening their view of the nature of alcohol problems to include public health perspectives. The potential of MADD as a strong prevention constituency is emerging on issues such as concurrent sales of alcohol and gasoline in mini-marts. While old viewpoints still exist, MADD today is receptive to recruitment in support of public health prevention proposals designed to reduce drinking driver problems.

Many other "victim" groups have also developed in the past few years. Some of the largest are composed of parents who become involved in activities because of tragedies in their own families. Along with personal guilt about the problems of their children, family members also commonly believe that educational institutions are to blame for failing to educationally "innoculate" their children against alcohol and drug problems. This focus on education as prevention may hinder acceptance of a broader public health perspective. I believe, however, that these groups are also becoming more sophisticated in their view of prevention as the public health perspective on alcohol problems is more widely articulated.

Clergy Groups

Traditional community groups are exhibiting renewed interest in alcohol problems. The clergy, for example, played an enormous role in the temperance movement in the United States, and were forceful supporters of prohibition. In the post-prohibition period, the clergy generally reverted to a focus on individual drinking standards, often imposing moralistic judgements about how individuals drink. Yet the clergy, collectively, can have great influence on community drinking standards.

This influence on normative community values about drinking can be of enormous help to those of us advocating prevention policies. Church leaders today, especially in low income and minority communities, are reawakening to their community leadership roles, and are receptive to the findings of research on the prevention of alcohol problems. While the failure of Prohibition for many years traumatized clergy advocacy of community-focussed prevention efforts, public health research provides new legitimacy and direction for the historical role of clergy.

Of course, the failure of Prohibitin also traumatized alcohol public health professionals, and led us to eschew involvement with the clergy. Men of science, went the thought, had little to gain from men of faith. Alcohol problems will be resolved neither by formula nor faith alone, and the promise of joint efforts should be pursued as a priority.

Law Enforcement

As a product of the turbulent 60's, I did not expect law enforcement to be receptive to a public health view of alcohol problems. I was wrong. Daily confronting the tragedies, and risks, of alcohol problems, police officials are not confused. They recognize that alcohol is not a neutral, harmless liquid, and that policies controlling its production, promotion, sale and use are essential.

On the other hand, police officials also recognize that it is impossible to enforce public laws which do not enjoy public support. The police are thus very sensitive to normative community standards, and usually are supportive of efforts to call community attention to alcohol problems.

Law enforcement also understands, as should we, that alcohol problems will not be finally solved, but only controlled. Together we have a stake in avoiding "quick fixes" and unrealistic expectations of prevention policies which may be proposed. Within this context, law enforcement officials can be an extraordinarily strong ally with public health professionals in efforts to prevent and manage alcohol problems.

Education System

As always, it is popular to look to our schools for leadership in prevention services. In truth, however, school based programs have yet to demonstrate their general effectiveness in alcohol problem prevention efforts. Perhaps it is time we took the schools "off the hook" and frankly admitted that education and prevention should not be used interchangeably.

There is no argument that schools should educate our children about alcohol and its use. To expect, however, education to change student, and later adult, drinking behaviour in a preventative way is to do harm to the integrity of both education and prevention. In short, I recommend we separate the educational and prevention responsibilities of the education system.

Having done so, I believe that alcohol public health professionals can communicate much more directly and clearly with school officials. The focus can now be on current drinking problems rather than presumed future problems, with the advantage that immediacy and problem context provide for problem resolution. Clearly a defined drinking problem in the parking lot following the Friday night football game suggests prevention options beyond the content of educational curriculum.

Alcoholic Beverage Industry

A final constituent group for prevention of alcohol problems is the alcoholic beverage industry. I previously viewed the alcoholic beverage industry as a monolithic entity with which I had nothing in common. Consequently it has been a shock for me to acknowledge that segments of the industry share common agendas with those of us concerned about the prevention of alcohol problems.

I am referring principally to the retail side of the industry. I believe that restauranteurs and local retailers especially are beginning to understand that their best interests rest with the community they serve, and not necessarily with those who supply products to their business. Local standards of responsibility and service are primary to business success, as well as personal satisfaction, and these beverage industry businessmen can be recruited to help solve local alcohol problems.

While I have not yet identified any common ground with the producers of alcoholic beverages, I have found that even they are not monolithic. Conflicts among the wine producers, the brewers, and the distillers over marketing tactics and advertising have occassionally, albeit rarely, resulted in some unexpected support for public health measures. For example, in response to price competition, the distillers have recently advocated that federal excise taxes be equalized on all alcoholic beverages, a sound public health proposal.

STRATEGY FOR CONSTITUENCY BUILDING

I have presented my impressions of community groups that should be viewed as potential allies for the support of prevention measures from a public health perspective. The challenge then becomes mobilizing those groups for an integrated approach to alcohol problem reduction within a given community.

Prevention initiatives that are based on the special concerns of those in the alcoholism field are not likely to generate community support. It is very difficult to convice others that "my" problem should become "their" problem. Problem identification based on theory rather than real life is often at the core of governmental prevention efforts, but communities do not often become concerned about theoretical problems (Reynolds, 1984).

Communities do become concerned about real life problems that emerge and clearly affect people's lives. Often those problems arise from personal tragedies, such as a child killed by a drunk driver or a visible disruption of community life such as drunken rowdiness at a sports event. Those problems are real and generate not only community concern but also community support for prevention measures.

Those of us interested in prevention must be prepared to respond to community concerns as they arise and to provide support to community groups with prevention strategies specific to the problems that they identify.

Problems can be anticipated. For example, in community development, issues of planning and land use affecting alcohol availability may emerge as gasoline mini-marts proliferate. Responses in the form of data on outlet distribution, or model land use ordinances, provide support to community groups wishing to exercise control over the number and type of alcohol outlets in their community. The ability to respond with specific information or technical assistance to groups that have, through events, identified an alcohol problem, is critical to transforming community concern into community action.

Events can be created and brought to the public agenda through data analysis. However, the data must be specific to a real world problem that can be easily recognized by community groups. For example, a study on methods of obtaining alcohol by convicted juvenile drinking drivers in San Diego County (Tyler and Segars, 1986) found that convenience stores are the preferred outlets for illegal purchases or purchases by a stranger over 21. This type of data can be used to generate community support for

server intervention training at convenience store outlets. However, it is critical once an issue is raised on the public agenda, that public health professionals have appropriate response mechanisms and materials to support community interest and desire to act. In the example of underage sales at convenience stores, support may be in the form of model conditional use permits requiring server training, model server training curriculums, and strategies for enacting local ordinances.

Alcohol public health professionals can plan in advance for responses to each problem type emerging from citizen group concerns. This advance planning assures that a full range of options is examined in the development of integrated resources and that we are prepared to "strike while the iron is hot." I believe that our best hope for prevention rests with the re-emergence of citizen-initiated prevention efforts, and we must begin to nurture and support these efforts.

NOTE

1. This presentation assumes the audience has a working knowledge of the unimodal theory of alcohol problem distribution and the public health view of alcohol problem prevention. Readers may wish to consult the work of K. Bruun, S. Ledermann, R. Popham, or W. Schmidt on the former, and the work of D. Beauchamp on the latter. For a summary presentation, see National Academy of Sciences (Moore and Gerstein, 1981).

REFERENCES

Moore, M.H., and D.R. Gerstein (eds.)
1981 Alcohol and Public Policy: Beyond the Shadow of Prohibition. Washington, D.C.: National Academy Press

Reynolds, R.I.
1984 "Altering the Drinking Environment at the County Level". In: Toward the Prevention of Alcohol Problems: Government, Business and Community Action. Washington, D.C.: National Academy Press: p. 137-144

Ryan, B.E. and L.B. Segars
1983 "San Diego County First Conviction Program Population Description", San Diego County Department of Health Services. Working paper

Tyler, P. and L.B. Segars
1986 "Survey of Juveniles' Method of Obtaining Alcohol Prior to Drinking and Driving". San Diego County Department of Health Services. Working paper

THE IMPACT OF SERVING PRACTICES ON DRINKING BEHAVIOUR

Eric Single
Social Policy Researcher
Addiction Research Foundation
Toronto, Ontario

INTRODUCTION

Epidemiological research on alcohol use has relied heavily on aggregate sales or tax data, or alternatively, on self-reported data regarding alcohol consumption. However, there is a growing concern over the methodological problems involved in using these types of data (see e.g. Single and Giesbrecht, 1979; Popham and Schmidt, 1981). At the same time, relatively little attention has been given to the direct observation of drinking, despite the fact that a considerable proportion of total alcohol consumption occurs and is readily observable in taverns and other public establishments.

In 1952, Macrory justified one of the pioneering tavern studies by referring to "the obvious importance of this institution ... as well as its nearly total neglect as an object of systematic study" (1952: 610). Even in the early 1960s the tavern was still referred to by G.H. Jansen as a "neglected topic of sociological importance" (deLint and Popham, 1963). Since that time, a number of observation studies on drinking have been conducted, commonly in connection with the observation of other behaviour. However, the literature on bars and taverns is relatively small and very diverse (Clark, 1981). It consists mainly of narrowly focussed, local studies conducted by sociologists and psychologists who are frequently unaware of similar work being conducted elsewhere. Furthermore, the policy and programme implications of this work are rarely brought to the attention of policy-makers.

The paucity of data on public drinking is particularly striking in view of the need for more complete research in two major areas of concern in the alcohol policy field -- the epidemiology of alcohol use and the determinants of heavy consumption.

First, there is a need for a comprehensive description of the basic parameters of public drinking. Sales data are enlightening but they hardly begin to describe public drinking and drinking patterns. What is the nature of on-premise drinking establishments? Is it possible to develop a typology of drinking locales based on the characteristics of the clientele or the types of activities which occur in them? Who frequents taverns? What is the temporal rhythm of public drinking?

A second and more analytical focus for research on public drinking concerns situational determinants of heavy drinking and/or deleterious consequences of consumption such as impaired driving and alcohol-related aggression. Apart from its implications for policies aimed at the prevention of alcohol problems, this work would be relevant to important theoretical issues. One of the major perspectives on the prevention of alcohol problems, often cited as the public health perspective, holds that controlling mean consumption will prevent further increases in alcohol-related health and social problems (see Bruun, et al, 1975). It is the official position of the Addiction Research Foundation (ARF, 1978) as well as a number of national (e.g. Moore and Gerstein, 1981) and international health organizations (e.g. WHO, 1980). This viewpoint rests on the well-estabished connection between mean levels of consumption and indices of alcohol-related problems.

A key intervening variable in this relationship is the prevalence of heavy drinkers, who may be influenced by the consumption of more moderate drinkers. Bruun et al. postulated a diffusion process through social networks as the basic underlying mechanism.

In addition to influencing heavy consumption, social drinking can have a direct impact on the incidence of alcohol-related problems. Even though heavy consumers have a greater likelihood of incurring alcohol-related health and social problems, there is no threshold at which one suddenly acquires a risk of alcohol problems. For example, even moderate drinking can increase the probability of being involved in a traffic accident. The work of Pequignot and his colleagues (1974) indicates that even a relatively moderate level of alcohol consumption (between 60 and 80 grams of ethanol per day) carries twice the risk of death from cirrhosis as the next lowest level of consumption (between 40 and 60 grams).

In sum, even when done in moderation, drinking in taverns is relevant to the development of alcohol-related health and social problems, not only because it can stimulate heavy drinking, but also because it carries certain risks in and of itself.

A wide variety of methodological approaches to the study of public drinking can be identified, but research in this area has tended to be based primarily or exclusively on unobtrusive observations in taverns. There are some examples of general population surveys on tavern-going and there is a small but growing body of work on experimental bars. Other approaches are quite exceptional. There are few historical studies and no community studies focussing on alcohol use. The best research designs should incorporate a variety of techniques, as each methodological approach has its drawbacks. Nonetheless, most studies have relied exclusively on one method.

The substantive issues and findings of research on public drinking can be summarized under the following topics: types of drinking establishments, characteristics of tavern patrons, situational determinants of drinking behaviour, and problems associated with drinking in public settings.

TYPES OF DRINKING ESTABLISHMENTS AND THE FUNCTIONS OF THE TAVERN

Historically, the tavern has served a variety of functions. The first drinking establishments probably originated in connection with inns for travellers sometimes during the third millenium B.C. in the river valleys of the Nile, the Tigris and Euphrates, and the Indus. Tavern behaviour was explicitly regulated in the Code of Hammurabi in ancient Babylonia. In his historical review of the tavern, Popham (1978) was particularly concerned with the political role of the tavern. By providing a meeting place for the lower and working classes to come together and discuss ideas, taverns have historically been associated with social unrest and revolutionary movements.

Indeed, throughout history one of the most salient features of tavern culture is its sociability. Even in the Temperance literature, the saloon was recognized by many writers to be "the poor man's club." The tavern also serves as an economic and sexual marketplace. Two examples of establishments which cater to sexual marketing are the singles bar and the gay bar. Because gay bars are both sexual marketplaces and community bars, they deserve greater attention on the part of the researchers. The only study which focusses on gay bars is that of Israelstam and Lambert (1984).

Given the many functions of taverns, it is not surprising that attempts to classify drinking establishments have yielded very diverse results.

Perhaps the best known classification of drinking establishments is that of Sherry Cavan from her classic study of the cocktail waitress in San Francisco in the mid-1960s (Cavan, 1966). Cavan distinguishes four types of bars: "convenience bars", which would include many of the downtown bars; "nightspots", which generally would feature entertainment; "marketplace bars", which would include singles bars, gay bars and business-oriented lounges; and "home territory bars", which would encompass not only Popham's notion of the neighbourhood tavern but also the skid-row tavern.

CHARACTERISTICS OF TAVERN PATRONS

The evidence regarding the correlates of tavern patronage is based on a very small number of studies. While young adults, males, and single persons are clearly more likely than others to frequent taverns, other sociodemographic variables are not strongly related to tavern-going. Although socioeconomic status is not strongly related to the chance that a person will patronize taverns, it does appear to be related to levels of consumption in the tavern, with lower income groups being more likely to drink in larger groups and thus consume higher levels of alcoholic beverages. Even these rather sparse findings are based mainly on U.S. studies.

SITUATIONAL DETERMINANTS OF HEAVY DRINKING

Research on public drinking behaviour has identified five major sets of situational determinants of heavy or problem-related drinking: temporal variations, characteristics of the drinking group, the length of time spent on one drinking occasion, the characteristics of the physical environment within the drinking establishment, and indices of availability.

Perhaps the most obvious correlates of heavy drinking are temporal variables. There is almost universally greater drinking during the evening hours and weekends than weekday mornings and afternoons. Indeed, this relationship is so common that most authors do not report it and exact data on temporal variations are needed for Canada. Nor have data been reported on the extent of drinking with meals. Given the general trend for alcohol to be less and less viewed as a special commodity (Single et al., 1981: 4-5), it might be expected that the strength of these temporal variables in drinking rates will diminish over time, but to date there have not been sufficient data reported to demonstrate this trend.

There is, however, a small set of studies which focus on festival drinking. The volume of drinking is considerably higher during holiday periods, as indicated by sales data (deLint, 1960a; 1960b). Indeed, from 1972 to 1976, December sales at the Liquor Control Board of Ontario outlets were 14% of the total annual sales versus the monthly average of 8% (Single and Giesbrecht, 1978: Table 17). Observation studies have confirmed the same pattern of increasing drinking during festivals. Ossenberg (1969) described drinking behaviour during the 1966 Calgary Stampede as a "middle-class binge". Listiak (1974) similarly found a strong relationship between disinhibited drinking and social class during

the 1972 Grey Cup Week in Hamilton. O'Donnell (1982), on the other hand, reported the victory celebration in San Francisco after the Forty-Niners football team won the Super Bowl in 1982 as a "neighbourhood festival" and a "celebration of the community as a whole" which offered everyone a chance to "be a winner." Whether the relationship between social class and festival drinking is a distinctively Canadian phenomenon remains at issue.

A situational factor which received a great deal of attention from researchers engaged in observational studies is the influence of the drinking group. The Mass Observation team found that isolated drinkers consumed less than people drinking in groups, and they attributed this finding to the social pressure of keeping up with the fastest drinkers (Mass Observation, 1941). A number of studies have shown that the consumption rate of drinking confederates is a strong influence on consumption, and that the influence of high-rate drinking companions is greater than the influence of low-rate drinking companions (Caudill and Marlatt, 1975; De Ricco and Garlinton, 1977; De Ricco, 1978; De Ricco and Niemann, 1980). It would appear that the drinking norms described by Bruun in 1959 among the subjects of his Finnish small-group drinking experiment continue to have a wide applicability. Bruun observed that it was permissible for a group member to drink more than other members of the group but not less (1959: 91).

A second way in which drinking in groups may influence patrons to drink more is via its effect on duration of stay. In this study of Edmonton beer parlors, Sommer (1965) found isolated drinkers consume less than persons drinking in groups, but he attributed this to the shorter duration of stay in the drinking establishments. The finding that group drinkers tend to consume more than isolated drinkers has been replicated in Canada (Storm and Cutler, 1981; Ratcliffe, et al, 1980b) and in the U.S. (Foy and Simon, 1978).

In addition to the size of the drinking group, a further influence on length of stay is the physical environment. By providing television, games and other activities, the tavern can increase the duration of patrons' visits and thus increase the volume of business. Even the tempo of music can influence drinking. Bach and Schaefer (1979) claim that the slower the tempo of country and western music played in bars in Western Montana, the faster the patrons consumed their drinks. Ratcliffe and his associates (1980a) found that in beverage rooms where dancing and games were provided, the patrons who participated in these activities stayed longer and drank more than non-participants. Sommer (1969) contrasts the Edmonton beer parlors with English pubs and attributes the short duration of stay by isolated drinkers in the former situation to the lack of anything to do other than sit and watch other people drink.

Apart from its impact on duration of stay, the physical environment can influence drinking behaviour in other ways. Cloyd (1976) details how the layout of "market-place" bars is designed to maximize patrons' discretionary powers to initiate and control encounters with other patrons. Cavan (1966) describes bars as "open regions" where patrons have the right to initiate conversation with others and an obligation to accept overtures from others. As Ratcliffe and his associates point out (1980b), the degree of such "openness" is manipulable: the closed nature of lounges tends to foster a genteel atmosphere and greater privacy, as compared with the more open nature of taverns. Contrary to what many would expect, however, Ratcliffe and his associates found no support for the assumption that the lounge atmosphere fosters moderate drinking. Thus, the physical layout of the drinking establishment very much affects the nature of drinking groups, the atmosphere within the setting and the length of drinking, but the net impact on consumption levels is not what one might expect.

Another situational determinant of heavy drinking which has not been given a great deal of attention is availability. There are no studies relating geographic density of taverns to volume of consumption in taverns. Without longitudinal data, the causal ordering of availability and consumption might be questioned, but one might at least expect studies to consider the impact of differentials in price as they affect consumption. No such studies exist, with one notable exception. Babor and his colleagues (1978) found that "happy hour" price reductions have significantly increased alcohol consumption on the part of both casual and heavy drinkers.

The lack of attention given to availability measures in tavern studies is perhaps not surprising when one considers the essentially social nature of public drinking. After all, if the purpose of going to taverns was simply to drink, one would find very few people patronizing them because it is much cheaper to drink at home. Nonetheless, indices of availability within the tavern setting may well prove to be important influences on drinking patterns, despite the fact that they have been relatively neglected by observation studies.

PROBLEMS ASSOCIATED WITH PUBLIC DRINKING

There are several problems associated with public drinking: drunk driving, public drunkenness and aggressive behaviour, and the contribution of taverns to the development of alcoholism.

One of the most salient policy issues with respect to drinking in taverns and other licensed establishments is the drunk driving problem. Nonetheless, this issue has received scant attention from researchers conducting observation studies. Fish and his colleagues (1975) found the tavern patron in Thunder Bay, Ontario, did indeed contribute significantly to the incidence of drunk driving. One third of the bar patrons in this study intended to drive after drinking; driving patrons did not have lower rates of consumption than non-drivers and were not concerned about having to drive after drinking.

In both experimental and natural situations there is considerable evidence that drunkenness is strongly associated with aggressiveness, even though it may not inevitably produce violence. Zeichner and Pihl (1980) found that intoxicated subjects were more aggressive in applying shock intensities to others when compared to placebo or non-drinking subjects. In the naturalistic barroom setting, a significant correlation between alcohol consumption and aggressiveness has been observed in New Zealand (Graves et al, 1981) and in Canada (Graham et al, 1978). In a series of studies (Graham et al, 1978; Graham and Turnbull, 1978; Graham et al, 1980), Graham and her associates examined the correlates of aggression in Vancouver taverns. In addition to the state of intoxication, it was found that a number of situational variables correlated strongly with aggressiveness, including duration of drinking, decor, noise level, cleanliness of the establishment, atmosphere and other aspects of the physical environment within the drinking locale. At issue is whether environment leads to aggression or whether violent people are attracted to particular environments.

As a supplement to his observation in Toronto taverns in the early 1950s, Popham (1982) arranged a series of group interviews with clinical alcoholics in order to ascertain the role of the tavern in the development of alcoholism. He found that alcoholics tended to frequent different types of establishments as their drinking became heavier:

> The change that occurred in the alcoholic phase of the drinking history appeared to be increasingly frequent isolation of the individual from his customary social milieu. There was increasing use of taverns of the skid-row type, which he would not patronize except when on a bender, and a corresponding association with persons he deemed to be of inferior social status. (Popham, 1982: 86).

The tavern served a dual purpose in the development of heavy drinking among these alcoholics. In addition to providing a source of alcohol, it filled the void left in the alcoholic's social life by his dissociation from former friends and family. As Popham puts it:

> The data suggests that the taverns was not only a source of alcohol but, for some discussants at least, provided a refuge from the anomie occasioned by the withdrawal (temporarily or permanently) from customary institutional associations such as family and old friends (Popham, 1982: 86).

Some of Popham's subjects even tried to partake of the social life of the tavern without drinking but they were not successful.

It is somewhat surprising that the adverse consequences of tavern drinking have not been a focus of many observation studies. Part of the reason may be the orientation of most observation studies toward the sociable and non-problematic aspects of tavern culture. The lack of attention placed on drunk driving and other alcohol problems indicates how the recent literature on the tavern differs significantly from the Temperance literature on the saloon.

Three major conclusions can be made regarding the literature on public drinking. First, the amount of research on public drinking is relatively sparse. Only four studies have ever been conducted in Ontario and only fifteen in Canada. Major types of approaches have yet to be tried. For example, there has been only one general population survey in a Canadian setting regarding the characteristics of tavern-goers (Pernanen and Carsjo, 1980). In Canada there have been no experimental barroom studies, no media studies and no community studies.

The second major conclusion regarding the literature on public drinking is that tavern studies have been largely atheoretical. As noted earlier, the study of public drinking can be justified on at least two major grounds -- an epidemiological research in that public drinking constitutes a large portion of alcohol consumption, and as basic research on the etiology of drinking problems in that public drinking constitutes a high portion of heavy drinking occasions. Most tavern studies have been ethnographic and descriptive in their approach, with no attempt to develop theoretical models to explain findings. The most notable exceptions to this pattern have been the small body of work on experimental bars, particularly Bruun's small group experiments (Bruun, 1959), and Storm and Cutler's (1975) theory of personal resources. Observational studies of tavern behaviour would profit from a greater awareness of the theoretical orientations of these works.

A third conclusion is that tavern studies have placed insufficient attention on the tavern staff. Regardless of the type of tavern involved, the tavern staff play a key role in maintaining the predominant function of the establishment. As Popham states (1982: 62):

> ... it is with the waiter or bartender that the patron is frequently in contact and likely to develop a sustained relationship.
>
> It seems to this writer that much of the patterned character of tavern life is attributable to these two functionairies, and that many questions which may occur to an observer can be answered by reference to their behaviour, for example: how regular status is developed and maintained, what causes shifts in the taverns favoured by particular groups, such as homosexuals, and not others, and what induces some patrons to drink faster and consume more in group situations than they otherwise would.

Popham then presents evidence for the importance of the tavern staff. Waiters and bartenders grant regular status to patrons via friendship behaviour, protective functions, special privileges and other preferential treatment. Their influence is so strong that it can be claimed that they select regular patrons and determine drinking rates.

In addition to the work of Cavan and Popham, a number of studies have focussed on either the waitress (Spradley and Mann, 1975) or the bartender (Smith, 1981a; Waring and Sperr, 1982). Several authors have recommended the use of the bartender as a resource worker for the prevention of alcohol abuse (Dumont, 1967; Bissonette, 1977: Waring and Sperr, 1982). However, this recommendation has yet to be successfully implemented in any program. The failure to do so should perhaps not be surprising. Popham has postulated four factors which affect the serving behaviour of the tavern staff: 1. management's desire to maximize profits; 2. the desire of waiters and bartenders to minimize their labour; 3. the desire to maximize tips and 4. patron tolerance. An attempt by tavern functionaries to reduce patron's drinking jeopardizes profits, tips and patron tolerance. Server intervention programmes must somehow deal with these realities.

In sum, the available evidence is sparse but it does indicate clearly that serving practices do have a marked impact on drinking behaviour. Indeed, one of the most promising areas for alcohol policy generally, and community impact programmes in particular, is the potential for reducing alcohol-related problems through server intervention programmes.

ACKNOWLEDGEMENTS

The assistance of Jennifer Evans, Honey Fisher and Paulette Walters is gratefully acknowledged. Parts of this paper were presented in Single (1985).

REFERENCES

Addiction Research Foundation
1978 "A Strategy for the Prevention of Alcohol Problems". The Journal, (June), Toronto: Addiction Research Foundation

Babor, T.F., J.H. Mendelson, I. Greenberg, and J. Kuehnle
1978 "Experimental Analysis of the Happy Hour: Effects of Purchase Price on Alcohol Consumption", Psychopharmacology, 58, p. 35-41

Bach, P.J. and J.M. Schaefer
1979 "The Tempo of Country Music and the Rate of Drinking in Bars", Journal of Studies on Alcohol, 40(11), p. 1058-1059

Bissonette, R.
1977 "The Bartender as a Mental Health Service Gate-Keeper: A Role Analysis", Community Mental Health Journal. 13(1), p. 92-97.

Bruun, K.
1959 Drinking Behaviour in Small Groups, Vol. 9. Helsinki: Finnish Foundation for Alcohol Studies

Bruun, K., G. Edwards, M. Lumio, et al
1975 Alcohol Control Policies in Public Health Perspective. Vol. 25. Helsinki: The Finnish Foundation for Alcohol Studies.

Caudill, B.D. and G.A. Marlatt
1975 "Modeling Influences in Social Drinking: An Experimental Analogue". Journal of Consulting and Clinical Psychology, 43(3), p. 405-415

Cavan, S.
1966 Liquor Licence: An Ethnography of a Bar. Chicago: Aldine

Clark, W.B.
1981 "The Contemporary Tavern". In: Y. Israel, F. Glaser, H. Kalant, R. Popham, W. Schmidt, and R. Smart (eds.), Research Advances in Alcohol and Drug Problems. Volume 6, New York: Plenum Press

Cloyd, J.W.
1976 "The Market-Place Bar: The Interconnection Between Sex, Situation, and Strategies in the Pairing Ritual of Homo Ludens", Urban Life, 5(3), p. 293-312

Cutler, R.E. and T. Storm
1975 "Observational Study of Alcohol Consumption in Natural Settings: The Vancouver Beer Parlour", Journal of Studies on Alcohol, 36(9), p. 1173-1183

DeRicco, D.A.
1978 "Effects of Peer Majority on Drinking Rate", Addictive Behaviours, 3, p. 29-34

DeRicco, D.A. and W.K. Garlinton
1977 "The Effect of Modeling and Disclosure of Experimenter's Intent on Drinking Rate of College Students", Addictive Behaviours, 2, p. 135-139

DeRicco, D.A. and J.E. Niemann
1980 "In Vivo Effects of Peer Modeling on Drinking Rate", Journal of Applied Behavioural Analysis, 13(1), p. 149-152

Dumount, M.P.
1967 "Tavern Culture: The Substance of Homeless Men", American Journal of Ortho-Psychiatry, 37, p. 938-145

Fish, T., G. Nurmi, C. Rooney, C. Managhan, and T. Managhan
1975 "The Drinking and Driving Patterns of Beer Patrons in Thunder Bay". Substudy No. 663. Toronto: Addiction Research Foundation.

Foy, D.W. and S.J. Simon
1978 "Alcoholic Drinking Topography as a Function of Solitary versus Social Context", Addictive Behaviours, 3, p. 39-41

Graham, K., L. LaRocque, R. Yetman, J. Ross, and E. Guistra
1978 "Alcohol and Naturally Occurring Aggression", A Report to the Non-medical Use of Drugs Directorate's Summer Resources Fund, Ottawa: Health and Welfare Canada

Graham, K., L. LaRocque, R. Yetman, T.J. Ross, and E. Guistra
1980 "Aggression and Barroom Environments", Journal of Studies on Alcohol, 41, p. 277-292

Graham, K. and W. Turnbull
1978 "Alcohol and Aggression: A Field Study". Unpublished paper presented at Western Psychological Association, San Francisco, CA, April 20

Graves, T.D., N.B. Graves, V.N. Semu, and I.A. Sam
1981 "The Social Context of Drinking and Violence in New Zealand's Multi-Ethnic Pub Settings", In Harford, T.C., and L.S. Gaines (eds.), Social Drinking Contexts. Research Monograph #7, Proceedings of a Workshop, Sept. 17-19, 1979, Washington, D.C., p. 103-120

Israelstam, S. and S. Lambert
1984 "Gay Bars", Journal of Drug Issues, 14, p. 637-653

deLint, J.
1960a "Festivities and the Consumption of Alcoholic Beverages", Substudy #102, Toronto: Addiction Research Foundation

deLint, J.
1960b "Festivities and the Consumption of Alcoholic Beverages": Further Data. Substudy #103, Toronto: Addiction Research Foundation

deLint, J. and R.E. Popham
1963 Translation of "The Tavern: A Neglected Topic of Sociological Importance," by G.H. Jansen. Substudy #179, Toronto: Addiction Research Foundation

Listiak, A.
1974 "Legitimate Deviance" and Social Class: Bar Behaviour During Grey Cup Week" Sociological Focus, 7(3), p. 13

Macrory, B.E.
1952 "The Tavern and the Community". Quarterly Journal of Studies on Alcohol, 13, p. 609-637

Mass Observation
1941 The Pub and the People: A Worktown Study. London: Gollancz

Moore, M.H. and D.R. Gerstein (eds.)
1981 Alcohol and Public Policy: Beyond the Shadow of Prohibition. Washington, D.C.: National Academy Press

O'Donnell, P.
1982 "The San Francisco Forty-Niner Victory Celebration: Festival Drinking in an Urban Setting", The Drinking and Drug Practices Surveyor, (August) p. 35-39

Ossenberg, R.J.
1969 "Social Class and Bar Behaviour During an Urban Festival", Human Organization, 28(1), p. 29-34

Pequignot, G., C. Chabert, H. Eydoux, and M.A. Courcoul
1974 "Augmentation de risque de cirrhose en fonction de la ration d'alcool", Review Alcoholisme, 20, p. 191

Pernanen, K. and K. Carsjo
1980 "Some Central Findings from the Survey of Experiences of Aggressive Behaviour and Alcohol Use in Thunder Bay 1977-1978: A Report to Respondents". Substudy #1084, Toronto: Addiction Research Foundation

Popham, R.E.
1978 "The Social History of the Tavern". In Israel, Y., F. Glaser, H. Kalant, R. Popham, W. Schmidt, and R. Smart (eds.), Research Advances in Alcohol and Drug Problems, Vol. 4. New York: Plenum Press

Popham, R.E. and W. Schmidt
1982 "Working Papers on the Tavern. III. Notes on the Contemporary Tavern". Substudy No. 1232, Toronto: Addiction Research Foundation

Popham, R.E. and W. Schmidt
1981 "Words and Deeds: The Validity of Self-Report Data on Alcohol Consumption", Journal of Studies on Alcohol, 42(3), p.355-368

Ratcliffe, W.D., R.W. Nutter, D. Hewitt, P.L. Flanders, K.M. Caverhill, and G.P. Gruber
1980a "Amenities and Drinking Behaviours in Beverage Rooms". Research Report, Edmonton, Alberta: Alberta Alcoholism and Drug Abuse Commission

Ratcliffe, W.D., R.W. Nutter, D. Hewitt, P.L. Flanders, K.M. Caverhill, and G.P. Gruber
1980b "Drinking Behaviours in Lounges and Taverns. Research Report", Edmonton, Alberta: Alberta Alcoholism and Drug Abuse Commission

Single, E. and N. Giesbrecht
1978 "Rates of Alcohol Consumption and Patterns of Drinking in Ontario 1950-1975". Substudy No. 961, Toronto: Addiction Research Foundation

Single, E. and N. Giesbrecht
1978 "The 16% Solution and Other Mysteries Concerning the Accuracy of Alcohol Consumption Estimates Based on Sales Data", British Journal of Addictions, 84, p. 165-173

Single, E.
1985 "Studies of Public Drinking: An Overview". In: E. Single and T. Storm, Public Drinking and Public Policy, Proceedings of a Symposium in Observation Studies held at Banff, Alta., April 26-28, 1984. Toronto: Addiction Research Foundation, p. 5-34

Single, E., P. Morgan and J. deLint (eds.)
1981 Alcohol, Society and the State. Vol. 2. The Social History of Control Policy in Seven Countries. Toronto: Addiction Research Foundation

Smith, M.A.
1981a The Pub and the Publican. London: The Centre for Work and Leisure Studies

Sommer, R.
1965 "The Isolated Drinker in the Edmonton Beer Parlor", Quarterly Journal of Studies on Alcohol, 26, p. 95-110

Sommer, R.
1969 Personal Space: The Behavioural Basis of Design. Englewood Cliffs, N.J.: Prentice-Hall, Inc.

Spradley, J.P. and B.J. Mann
1975 The Cocktail Waitress. New York: Wiley

Storm, T. and R. Gruber
1975 "Alcohol Consumption and Personal Resources", Journal of Studies on Alcohol, 36(7), p. 917-924

Storm, T. and R.E. Cutler
1981 "Observations of Drinking in Natural Settings: Vancouver Beer Parlours and Cocktail Lounges", Journal of Studies on Alcohol, 42(11), p. 927-997

Waring, M.L. and I. Sperr
1982 "A Comparative Study of Male and Female Bartenders: Their Potential for Assisting in the Prevention of Alcohol Abuse", Journal of Alcohol and Drug Education, 28(1), p. 1-11

World Health Organization (WHO)
1982 Report of a World Health Organization Expert Committee on Problems Related to Alcohol Consumption, Geneva: WHO

Zeichner, A. and R.O. Pihl
1980 "Effects on Alcohol and Instigator Intent on Human Aggression". Journal of Studies on Alcohol, 41(3), p. 265-276

THE APPLICATION OF MARKET SEGMENTATION IN ALCOHOL AND DRUG EDUCATION: THE APPLAUSE PROJECT

Andrea Stevens Lavigne
Community Services Consultant
Addiction Research Foundation
Toronto, Ontario

INTRODUCTION

The APPLAUSE project was initiated to address the need for a systematic approach to providing short-term drug education interventions to high priority target groups. Educational materials and promotional messages were developed to match the target group's demographic characteristics as well as its wants and needs. In addition, other expert knowledge and our own experience in drug education and health promotion were incorporated.

Marketing principles and program experience suggest that the involvement of target groups in the planning of public education enhances the prospects for successful intervention. Better knowledge of these target group characteristics, attitudes, behaviours and needs will assist educators in designing and selecting appropriate messages. At the same time, due to the nature of social marketing it is essential to determine the objective needs of the target group as well as self-identified needs or desires.

One of the basic concepts of any marketing strategy is market segmentation. The overall market is comprised of "buyers" with different wants, needs, styles and responses which can be categorized into segments. In marketing research, the demographic profile of the consumer was most often used for market segmentation. However, in an effort to know the consumer better and therefore improve the acceptance of the product, lifestyle or "psychographic" profiles were researched. Psychographics go beyond demographics to include "activities, interests, opinions, needs, values, attitudes and personality traits" of the consumer (Wells, 1975). For example, breweries will often direct their advertising toward regular beer drinkers rather than occasional drinkers. Therefore, their market segmentation is based on use rather than on a demographic characteristic. The substantial increase in consumer-related knowledge as compared to the traditional approach (i.e. demographic) leads to improved understanding of buying behaviours and thus more market-oriented, less risky products.

Once potential lifestyles are identified, new products can be created, tested and validated to match the needs of the particular segment. Alternately, existing products can be repositioned to appeal to a particular lifestyle segment.

The current project has involved extensive data collection on consumers of alcohol and drug education in order to position this service to best match the needs, attitudes, characteristics and behaviours of one of our top priority target groups, namely, parents. Data were used to complement the judgement and expertise of Addiction Research Foundation staff and of other professionals.

PRELIMINARY FORMATIVE RESEARCH

In the preliminary planning phase of the project, two public mall displays were conducted in order to survey the general public for attitudes toward alcohol, personal consumption patterns, drinking behaviours and preferences for specific alcohol education messages. The displays were held in October, 1982 and February, 1983 in two shopping malls in southwestern Ontario as part of a local Health Fair. A wide range of Addiction Research Foundation literature and posters were displayed. In addition, one videotape (Moderation at All Times), presenting a control policy message was shown at one display while another presented a personal moderation message, (Senior Adults Traffic Safety and Alcohol) was shown at the second display. Passersby were asked to view the film, and then complete a questionnaire which asked for the following information:

a) an evaluation of the film, using 14 seven-point semantic differential scales;
b) demographic characteristics;
c) attitudes toward alcohol policy;
d) alcohol consumption in terms of quantity, frequency and variability;
e) drinking occasions;
f) any adverse health and social consequences experienced as a result of alcohol consumption.

A total of 390 people from both events completed the questionnaires.

In addition to providing community service, these preliminary initiatives were undertaken to achieve the following:

a) to demonstrate that the general public's compliance and cooperation with this type of initiative was high;
b) to gather data on attitudes, behaviours, demographics to be used to segment the general population for the purposes of a focussed intervention;
c) to demonstrate that the educational materials chosen were generally acceptable to the public.

Correlational analyses were performed on the data collected at both mall displays. Many programming interventions in the health promotion field are based on assumptions about the relationships among demographics, attitudes, risky health practices and health and social consequences. The following statistical correlations served to substantiate or cast doubt upon previous assumptions made in developing drug education messages.

1. As would be expected, an individual's increased consumption strongly related to an increased chance of negative consequences associated with this behaviour ($p < .001$). Surprisingly, however, other risky drinking practices (e.g. drinking during work hours, before or during driving) were not directly correlated with the occurrence of health and social consequences.

2. As positive attitudes towards alcohol use increased, so did the reported prevalence of risky practices ($p < .05$). These positive attitudes towards alcohol use related positively to specific demographics such as youth, small numbers of children and lower income ($p < .01$). In addition, a strong direct relationship existed between positive attitudes about alcohol use and opposition to alcohol control policies ($p < .001$).

3. Individuals who felt a sense of responsibility toward others regarding alcohol use reported lower consumption ($p < .01$). There were no specific demographics related to this attitude.

4. People opposing alcohol control policies reported increased consumption ($p < .05$) and greater risky drinking practices ($p < .01$). People who wanted more policy controls (conservative attitude) were older and had children ($p < .001$).

5. Acceptance of the policy message, represented by the film "Moderation at All Times", was strongest with respondents who also favoured alcohol control policies ($p < .001$). The message was received least well by individuals reporting high alcohol consumption (number of drinking occasions X amount consumed) ($p < .01$).

6. The moderation message, represented by "Senior Adults, Traffic Safety and Alcohol", was most likely to be accepted by individuals who felt a sense of responsibility towards others. Rejection of the moderation message was strongest with people who reported high and frequent alcohol consumption, were younger and had no children ($p < .01$).

Discriminant function analysis was used to derive initial segments. One known target group, parents of school-aged children, was chosen for the purpose of further psychographic segmentation.

Parents are one of the top priority targets for alcohol and drug education for several reasons:

- they have significant influence on one of the most high-risk target groups, namely, youth, either by preventing risky behaviour or by intervening in early stages of substance use

- many parents are predisposed to alcohol and drug education messages because of their concerns for their children

- they may also have influence on key contacts in the political and educational system who can in turn influence drug education curriculum and alcohol policy development

Research related to influences on adolescent drug use has indicated that parents' use of alcohol and other drugs has a significant impact on the children's use of drugs (Josephson and Carroll, 1974). Although peer pressure may have a greater impact on youth, parents can still exert their own influence by becoming more knowledgeable about alcohol, examining their own drinking habits, teaching safe drinking habits, modifying their child-rearing practices and supporting schools and governments in educating about and controlling alcohol problems (Smart, 1980). Typically, younger children are even more influenced by their parents' behaviour and attitudes.

Furthermore, parents were considered an appropriate target for this particular intervention because the short-term educational messages which were planned (in this case, public-speaking presentations) could be used to support other more intensive, long-term programs, such as school drug education programs. In addition, interested parents were relatively easy to access through existing community groups, such as parent groups, church-affiliated groups and service clubs.

Since parents were a relatively known quantity due to our organization's wealth of experience with this target group, they proved to be a useful segment in testing previous assumptions. As noted above, the

mall display data indicated that parents were not just a demographic segment but also a psychographic one. As a group, they possessed certain attitudes and behaviours which differentiated them from the rest of the general population. Demographically, parents were older, with higher education and income than the rest of the population. In terms of psychographics, they were more in favour of alcohol control policies; their attitudes towards alcohol were less positive; they engaged in less risky drinking practices, including lower consumption levels; they were less likely to prefer a moderation strategy (as opposed to very low risk use) than the rest of the population.

SEGMENTATION MODEL

In order to segment further the target group, additional data were collected at fifteen public-speaking presentations. The format was lecture-style with a substantial question-and-answer and discussion period. The drug education messages focussed on the three most prevalent drugs among Ontario youth (alcohol, tobacco and cannabis) as identified in the 1983 Addiction Research Foundation student survey (Smart, 1983). The four major themes of the presentation were identified from previous knowledge of the target group's interests and requests for information, as well as from professional expertise in determining their needs. The themes and learning objectives were as follows:

1. FACTS To increase awareness about the prevalence of use of alcohol and other drugs.

2. PREVENTION To increase awareness of strategies for preventing use.

3. DETECTION To increase awareness of ways of identifying use.

4. MANAGEMENT To increase awareness of ways to cope with use.

In addition to increasing awareness of these strategies, it was expected that parents would be encouraged to use the information, for example, by supporting school programs, discussing the subject of drug use with their children, and contacting local health and social services for assistance, if necessary. In turn, the ultimate goal was that the intervention would help to reduce the likelihood that their children would experience health and social problems related to drug use.

The completed sample of 248 parents (combined audiences of 15 public-speaking presentations) was used to develop a more specific description of the target group. In all cases, the results were consistent with the previous data analysis from the mall displays.

DESCRIPTION OF TARGET GROUP

Demographics: Parents who attended Addiction Research Foundation public education events are usually married (80%), have high school or post-secondary education (68%), 2-3 children (53%), and above average income (average $29,000). One-third of the group surveyed know someone close to them who currently has an alcohol-related problem. One-half know someone who had an alcohol-related problem in the past.

Attitudes: The majority (65%) believe that parents have influence over their children's behaviour. Most (77%) do not hold favourable attitudes towards alcohol.

Behaviours: In general, parents report moderate alcohol consumption levels (average consumption of 1.8 drinks per day and average of 2.4 drinks per occasion). Health and social consequences of drinking are also very minimal (94% have never been absent from work due to alcohol; 98% have never received help for drinking).

Preferences: Parents were more likely to accept messages relating to social policy than non-parents. Information about drugs rather than information about alcohol was of more interest to parents. Management and detection of drug use were preferred to topics related to prevention. With minor exceptions, all parents liked a wide variety of presentation resources - films, pamphlets, lectures, question-and-answer and discussion periods.

"Risky drinking practices" was chosen as a dependent measure on which to further segment the group. The variables used to define risk were: alcohol consumption level (number of drinks per occasion), drinking and driving, absence from work due to drinking, and having received medical or professional help for drinking. The assumption was made from programming experience and corroborating statistical evidence (noted above) that an individual's level of alcohol use and his likelihood of engaging in other risky drinking behaviours would influence his acceptance of various drug education messages. The attitudes and behaviours of specific segments are considered important determinants of both the type of drug information the consumer should hear and they type he **wants** to **hear.** Research also indicates that parents' drinking behaviour is a potential indicator of their children's level of risk with regard to drug use.

LOW RISK VERSUS AT-RISK SEGMENTS

Although parents, as a group, have less risky drinking behaviours than the general population, the risk variable did distinguish between two segments - those at no risk (at the safest end of the scale), and those at some risk (who have experienced negative social and health consequences of drinking themselves or are in danger of experiencing same).

Description of Segments

Low Risk (N = 122)

Demographics: Parents in the low risk or safe group are more likely to be female; only 33% of the male sample were in this category while 55% of the female sample were. They are also more likely to be housewives; 61% of this employment group were considered low risk.

Attitudes: This group is in favour of legal and social controls regarding alcohol use. They strongly agree that drinking and driving is dangerous. They do not hold favourable attitudes towards alcohol.

Behaviours: This group does not engage in any risky drinking behaviours. They have an average of 0-2 drinks per day with no more than 3 drinks per occasion. They never drink and drive. They have never been absent from work due to drinking and have never received help for drinking.

At Risk (N = 126)

Demographics: These parents are more likely to be male; 77% of male sample were in this category. They are generally blue collar; 77% of blue collar are in this risk group, or clerical/sales workers; 66% of this employment group are at risk. Those with higher levels of alcohol consumption are also more likely to have higher incomes (average $31,000 p.a.).

Attitudes: This group is opposed to legal and social controls regarding alcohol use. They agree to some extent that drinking and driving is dangerous. Their attitudes towards alcohol are more favourable than those of the low risk group. Those with higher levels of alcohol consumption also tend to agree less that parents have influence over their children's behaviour.

Behaviours: The more risky group either engaged in risky drinking behaviour (more than 3 drinks per occasion, drinking and driving) or has experienced health and social consequences related to drinking (being absent from work due to drinking, receiving help for drinking).

Because of these differences, the initial generic package for parents was modified to match more appropriately the attitudes, behaviours and preferences of the individual segments. A key informant approach was also used to augment existing knowledge and statistical inferences.

Personal interviews were held with various professionals in the health promotion and marketing fields. The recommendations received for our messages confirmed the themes previously identified.

A handbook was then developed for presenters, with background information on all pertinent subject areas, potential resources, tips for presenting and descriptions of the target group and segments. In addition, two sample presentations were written from these materials with variations in content and style for each segment. These two presentations are currently being tested and evaluated both in response to incoming requests from community groups and also on a proactive basis by promoting events to specific segments.

In practice, low risk or at-risk segments of adult groups can be distinguished according to certain indicators mentioned above. For example, if the audience is an existing community group, the group leader can be questioned about demographic data, particular interests, and usual practices of the group at meetings (i.e. open bars at the event may be one clue to drinking behaviour). If advertising an event, promotional messages can be geared to specific attitudes and behaviours which correspond to the risk segment chosen.

Pre and post tests are used to gauge consumer satisfaction of the presentation, knowledge retention of the major learning points and behavioural intentions with regard to various strategies encouraged in the presentation, i.e. supporting school drug education programs, discussing alcohol and drugs with one's children, seeking additional drug information from other sources, and attending parents' workshops. It is also expected that satisfaction with the designated presentations will be correlated with the segment identified.

The formative research techniques used in this project are similar to those used in market research done by an American firm, Grey Advertising (1975), for a public education campaign related to drinking and driving. A relatively extensive survey, including questionnaires and personal interviews, was used to identify four basic groups of high-risk consumers. They were classified according to the degree and nature of measures used to evade drinking and driving. Demographic, attitudinal and behavioural variables (including consumption data) were used to describe the segments.

Similarly, the APPLAUSE project attempts to go beyond demographic segmentation to the identification of segments which can be described on the basis of needs, attitudes, behaviours and preferences as well as demographics. Consumer input and expert opinion are also incorporated to supplement survey data so that the most appropriate and therefore, the most acceptable messages can be developed. In this way, more effective presentations are designed for various target groups. Thus it is expected that more systematic information dissemination involving higher quality messages will be possible.

ACKNOWLEDGEMENTS

The author wishes to acknowledge the valuable contributions of Margaret Simmons, B.A., Werner Albert, Ph.D., and Larry Hershfield, M.S. Additional thanks are also due to Marlene Swarbrick and Wilfred Orgias for their participation in the initial planning stages of the project.

NOTES

1. Appropriate public presentations for learning about alcohol and other drugs using segmentation effects.
2. Social marketing has been defined as the "design, implementation and control of programs seeking to increase the acceptability of a social ideal or cause in a target group(s)", (Kotler, 1982).
3. "Moderation at All Times" is a five minute film produced by the Addiction Research Foundation in 1975. It explains Schmidt and de Lint's theory of alcohol consumption and social control policy.
4. "Senior Adults Traffic Safety and Alcohol" is an eleven-minute film produced by the AAA Foundation of Traffic Safety in 1978. It presents a personal moderation message including ways to practice responsible use of alcohol.

REFERENCES

Grey Advertising Incorporated
1975 "Communications Strategies on Alcohol and Highway Safety", Virginia: National Technical Information Service, U.S. Department of Commerce

Josephson, E. and E. Carroll
1974 Interpersonal Influences on Adolescent Drug Use. Washington, D.C.: Hemisphere Publishing Corporation

Kotler, P.
1982 Marketing for Non-Profit Organizations. Englewood Cliff, N.J.: Prentice-Hall, Inc.

Sadrudin, A. and D. Jackson
1979 "Psychographics for Social Policy Decisions: Welfare Assistance",Journal of Consumer Research, 5, p. 229-239

Shain, M., W. Ridell and H. Kilty
1980 The Parent Communication Project: A Longitudinal Study of the Effects of Parenting Skills on Children's Use of Alcohol, Toronto: Addiction Research Foundation

Smart, R.
1980 The New Drinkers: Teenage Use and Abuse of Alcohol. Second Edition. Toronto: Addiction Research Foundation,

Smart, R., M. Goodstadt, E. Adlaf, M. Sheppard and G. Chan
1983 "Preliminary Report of Alcohol and Other Drug Use Among Ontario Students in 1983 and Trends Since 1977", Toronto: Addiction Research Foundation

Wells, W.
1975 "Psychographics: A Critical Review", Journal of Marketing Research, 12, p. 196-212

CAMPUS ALCOHOL POLICIES AND EDUCATION (CAPE) FOR LOW RISK DRINKING: PILOT PROJECT AT THE UNIVERSITY OF WESTERN ONTARIO

David Hart
Community Consultant
Addiction Research Foundation
London, Ontario

As a Community Consultant with the Addiction Research Foundation I work on the design and implementation of education programs at the local community level. I want to briefly describe a program that we have done in the city of London over this past year, specifically at the University of Western Ontario. In considering the design and implementation of this program I certainly must credit two individuals who are here today: Robbie Simpson who has been a theorist, if you will, of the program I am going to describe, and Louis Gliksman who, as a scientist, has been involved in the evaluation and program ideas from the beginning.

I would like to begin by asking you to do some role playing. Consider that you are a university administrator, that you are perhaps a Dean of Students or Head of Student Affairs working for a University. At this university you have had an increase in the number of liquor outlets over the last ten years and now you have several liquor outlets of some sort on campus. There have been a few problems recently with the use of alcohol at your university. There may have been some big street parties recently. You are concerned about some rowdy behaviour at the local football game, and concerned about the public image of your university. Also, about two years ago the President of your university asked you to get together a group of administrative staff to see if something should be done about the drinking that goes on on campus and the problems related to it. But your group has determined no clear action that could change the problems identified. It is to you, the university administrator, that I now wish to describe a possible course of action for your campus.

BACKGROUND

Young adults such as those at our Ontario universities are developing their lifestyles, exploring new relationships, new knowledge and new experiences. Many have already made a decision to drink, at least occasionally. The question of how to drink is more challenging. There are a number of motivations for drinking, even drinking to excess. Alcohol is used to relieve stress, to relax, to "cut out", to celebrate

and to feel high. Social acceptance in drinking seems to enhance social events, and good times are focussed on drinking. Alcohol is used as a social lubricant to create a sense of belonging to the group. Adult status may be achieved by drinking. The change from home to university life offers the friendship of drinking groups and new freedom to"do your own thing". The opportunities to drink increase on reaching the legal drinking age; parties and licenced events are available to students every weekend and campus taverns serve relatively low priced alcohol after class. It is easy to increase the number of drinking occasions each week and the amount drunk at any one of these occasions.

Too often students do not recognize the possible consequences and implications of their drinking behaviour, especially with the confusing attitudes that we have in our society such as that getting drunk is acceptable; proving you can drive after drinking is really macho; and having a hangover is the only price you have to pay for a weekend of heavy drinking. On university campuses serious alcohol problems are experienced by a minority of students. Motor vehicle accidents are the leading cause of death and injury among the 15 to 24 age group, and drinking is a factor in 40% of these fatalities. Over 30% of university students report driving after having too much to drink. There are recreational or sporting accidents related to drinking such as when skiing or swimming or while attending a football game. Arrest for drunken or aggressive behaviours, black-outs, alcohol dependence are all examples of more serious problems. We understand that usually over 10% of the students on campus are heavy drinkers. A larger proportion of the student body experience less serious alcohol-related problems which are, nonetheless, undesirable from a health and social perspective: nausea, vomiting, gastritis, hangovers, missed classes, vandalism, disturbing the peace, fighting and personal injury accidents and problems in relationships.

Universities experience an array of incidents involving behaviour changed by alcohol: a fire at a campus residence that happened after a drunken toilet-paper fight; barrier gates broken at a railroad crossing by a couple of students coming home from a tavern late one night; broken glass, noise and public drunkenness at a big street party causing neighbours to complain. Problems such as these may be linked to a set of four risk drinking behaviours among student populations:

1. Drinking to drunkenness, "overdrinking" on any particular occasion in excess of four drinks per occasion.

2. Maintaining high average levels of consumption such as daily, or almost daily drinking, and consuming in excess of 14 standard drinks per week.

3. Drinking and driving; that is, consuming any alcohol before driving a car, truck, motorcycle, or snowmobile.

4. Drinking during academic activities; drinking while studying or before class, or drinking instead of studying or attending class.

To prevent problems related to these drinking behaviours, a program is needed that can inform as well as persuade people to choose drinking levels or practices which are at low risk to their health and social well being. The program ought to give positive messages about what can be done. It ought to set standards by which young people can gauge their own decisions for drinking, if they do choose to drink. It needs to minimize the frequency of risky drinking behaviours in the student body. And an alcohol program on a university campus must be comprehensive, able to reach the majority of students, long lasting and effective in changing knowledge, attitudes and behaviours.

The Addiction Research Foundation has developed a program to address this issue. Piloted at the University of Western Ontario, it is called Campus Alcohol Policies and Education for Low Risk Drinking or CAPE. CAPE began at the University of Western Ontario in 1984. Developed by the London office of the Foundation it received generous support from staff and students at the University of Western Ontario. Western is a university of about 19,000 students and about 4,000 of those are in their first year. The program is designed to create an environment on campus that facilitates personal moderation in alcohol consumption and that inhibits drinking levels and practices associated with alcohol problems.

The CAPE program offers a comprehensive approach to the management of campus drinking. It has two interrelated components. First, it has an extensive education campaign that includes public media, small group, and individual communication strategies; and secondly, it has a set of campus alcohol policies to guide the management of alcohol outlets on campus.

The primary focus of the CAPE program is on incoming first year students. The first few months that the students are on campus often determine their drinking patterns. Arriving on campus is a major change in their life. This is the time they make decisions about their drinking experiences with their new friends in a new environment. We want to reinforce their attitudes in favour of selecting and maintaining low risk drinking levels and practices.

At Western, the CAPE program began before the first year students left home. An entertaining booklet entitled "AppropriActivity: An Undergraduate's Guide to Convivality", was sent by mail to 4,000 incoming students in August, 1984. The program continued throughout the academic year. The two components of the program, the Campus Alcohol Policies and

the Education Campaign, also have an effect on the entire student body. Due to the principal focus on first year students, CAPE is not expected to realize its full impact until it has been delivered to successive years of students over a three or four year period.

The program involves a continuing commitment to the prevention of alcohol problems, a commitment made by the Student Services Department at Western. The leadership and support of the Director of this Department, Dr. Tom Siess, was important to the program's success. Much assistance was also provided by the Nurse Educator on the campus, Ms. Ardath Hill, who worked on both the planning and implementation of this unique program. Ms. Hill works with Student Health Services on campus. Many other departments were also involved: Student Housing, Food Services, the Tavern Managers; and members of the University Students' Council, and Student Police.

EDUCATION CAMPAIGN

The education campaign is designed to provide positive and useful messages about drinking. We use lots of repetition and reinforcement in different types of media format. It is designed to reach as many students as possible, especially those in first year. It gives very clear guidelines for moderate drinking, and information that would be helpful to the students in making their decisions about drinking. The content of the education campaign focusses on ways to avoid four risk drinking behaviours. The themes are:

1. When drinking becomes drunkenness
2. Drinking and your health
3. Drinking and driving
4. Drinking and learning

The general message is, if you choose to drink, here are some ways to have a good time with your friends and avoid the hassles of drinking too much or at an inappropriate time. The campaign presents information on the effects of alcohol, the serious consequences of the four risk drinking behaviours, and the opportunities and merits of personal moderation. As well it presents information about how to adopt and maintain low risk levels and practices when drinking. The campaign design is based on the Health Belief Model of health promotion.

The campaign identifier, the term "AppropriActivity", is used on all the educational materials to provide continuity and focus. The term is intended to link appropriate decisions by students and activities regarding drinking with regard to their good health, social experiences

and academic standing. The key educational tool is the book "AppropriActivity: An Undergraduate's Guide to Convivality". The booklet was mailed in August to first year students along with a covering letter and some other information that welcomed them to university campus. A computer mailing list was obtained from the most recent student list in the Registrar's Office. Materials coming from the university in August, before the first students come to university are likely to be read by the students and considered in light of the experiences that they anticipate in the near future. In addition, the booklet was made available to all students throughout the school year through exhibits, Health Services, Counselling Services and a central information desk. The booklet has received a high level of acceptance by students who find it innovative, positive and humourous.

A second part of the educational campaign is a set of four 11" x 16" coloured display posters and 8-1/2" X 12" handouts. Each is designed to address the four risk drinking behaviours, to reinforce the messages in the booklet. Another innovative feature of the CAPE Program is that it gives specific guidelines to drinking behaviour in order for students to maintain their low risk status. A guideline is featured on each set of posters and flyers:

1. No more than one drink per hour, No more than four drinks per occasion.
2. Seven drinks or fewer per week.
3. If driving, don't drink.
4. When studying, don't drink.

In the Fall and Winter months the theme of the educational campaign shifted from one of these messages to another. "Theme Weeks" concentrated attention on each successive message. The posters were displayed in campus building and residences. The flyers were handed out by residence staff to students in residence. In addition, advertisements on each message theme were run in the student newspaper, The Gazette, with a similar text, colour and size as the flyers. There is also a set of four "AppropriActivity" campaign buttons which were distributed to students. These were given out during Orientation Week to establish recognition for the campaign.

We set up an exhibit on campus and also outside the cafeterias of student residences at dinner time. We distributed free buttons, displayed different types of non-alcoholic, light alcohol and regular drinks and talked with interested students. The buttons were also worn at various times during the school year by bartenders who gave them to patrons when requested. They were available also with the AppropriActivity Booklet from Student Health Services, and soon became sought-after collector items.

In addition to campaign materials the educational campaign also provided face-to-face discussion with residence students. A one-hour presentation was developed and delivered to groups of 15-30 students at periodic "floor meetings" at campus residences. The interactive nature of these meetings helped us to discuss the topic more fully and to reinforce the students' decisions to maintain low risk levels and practices.

For the residence presentations the educational messages of the campaign were integrated with the Student Health Services program on sexuality called, "Can We Talk?". The presentation included a case study, to generate small group discussion in which students commented on a story about a student couple on a date where risks in drinking practices and sexuality have become issues. Information on alcohol and techniques for moderation were demonstrated using a "beer" case example. A short video tape made by students, on sexuality issues, was also given at the meeting. Discussion with and among the students encouraged sharing of experiences, perspectives and suggestions. The presentations were made by professional staff from the Foundation and from Student Health Services. These staff were trained in alcohol-related issues and comfortable in using adult education techniques.

The cooperation and support of residence staff was great. We feel though that next year it is important to look at the training and use of residence dons and student volunteers to see if there are ways in which we can cut down on the professional staff time needed for these presentations. For example a short video tape may be appropriate to demonstrate techniques of low risk drinking with discussions led by trained student volunteers.

The guiding principles behind the education component of the CAPE program are that it has a positive message, that is has clarity and consistency and lots of repetition, and that the message complements the set of alcohol management policies guiding alcohol use and availability on campus.

CAMPUS ALCOHOL POLICIES

Alcohol is served on most campuses under the auspices of what is known as a Canteen Licence. The responsibility for this licence may rest with the administration or may be shared with student government. The licence is the legal authority to operate, under specific conditions, campus-based taverns and licenced events, events such as dances or student pubs. The operation of licenced areas and events entails substantial legal responsibility under the Liquor Licence Act of Ontario. These include provisions for serving minors, for serving intoxicated patrons, and, in some cases, for the safe transportation of intoxicated patrons to their homes. Recent civil liability suits in Ontario have been settled in favour of individuals who were injured after being served to a state of intoxication in licenced establishments.

A set of Campus Alcohol Policies should be designed to reduce legal liability associated with drinking. As well, certain conditions in the drinking environment on campus are known to encourage the adoption of low risk drinking behaviours while others impede their adoption. These conditions affect alcohol availability. They include the price of alcohol, the price and promotion of non-alcoholic drinks and food, the practices of bartenders and servers, the atmosphere in which drinking occurs, the publicity and enforcement of standards of behaviour, and the advertising of drinking occasions. In the learning environment of the university campus there is an opportunity, and more importantly, a responsibility to enhance the health and social well being of students as well as their academic excellence.

At the University of Western Ontario, an Alcohol Advisory Group was formed to address and coordinate alcohol-related issues on campus. Members were invited from the Departments of Housing, Student Health, Food Services, University Community Centre, Student Council, Student Police and Society of Graduate Students along with a representative from the Addiction Research Foundation. The meetings were chaired by Dr. Siess, Director of Student Services as Coordinator of the Campus Canteen Liquor Licence. The group addressed alcohol management problems and opportunities, recommended a revised set of policies and guidelines, and assisted with their implementation. Student groups and university staff affected by the changes were consulted and appropriate clarification and orientation was provided.

The recommendations of this Alcohol Advisory Group focussed on four major areas: Licenced Events, Taverns, Pricing, and Availability. In the management of licenced events the focus is on training bartenders regarding preparation of drinks, avoiding serving intoxicated patrons, and on legal and operational responsibilities. Food and non-alcoholic drinks were made more available and the revenue structure was re-organized so that alcohol is not the major source of profit for these events. We established procedures for advertising, and for organizing an event. We looked at the issue of policing and door admission fees and considered ways of continuing the evening's entertainment after closing the bar down early, by offering food and soft drinks.

The second policy area considers the operation of tavern facilities on campus. At the University of Western Ontario there are three taverns and one licenced restaurant. The concern was with training bartenders and servers regarding their legal responsibilities and introducing serving techniques for low risk drinking. The availability of non-alcoholic drinks and food was promoted by having price lists on tables so patrons entering the establishment knew what drinks were available and what they cost. Light alcohol drinks were promoted. Several prices for

non-alcoholic drinks in the last hour of operation of taverns was considered. Techniques for discouraging overdrinking were discussed (buying of rounds, "doubles", or pitchers of beer). We also worked with management to determine how the drinking environment makes a difference in consumption patterns. "Drink Light" table talkers were used as a way of promoting the availability and desirability of the light alcohol beer instead of regular beer.

The third policy area concerns pricing and the consumption of low alcohol substitutes at university outlets. Here it is desirable to maintain some consistency between the alcohol prices on campus and those at commercial taverns off-campus. We also established a differential price structure relative to absolute alcohol content. At Western, the prices of beer were related to the actual percentage of alcohol in the beverage, making a difference, depending on the outlet, of 15 cents to 25 cents between light bottled beer (2.5% to 4% alcohol) and regular bottled beer (5%). The policy was established that all draft beer in the taverns was changed to light beer; liquor shots were changed to one ounce, rather than one and one-quarter ounces. We will see how price may affect individual consumption as well as profits. Certainly the promotion of light beer may be an effective way to increase its substitution over beverages with higher alcohol content.

The final policy area that the Alcohol Advisory Group is reviewing is the general availability of alcohol on campus. It is proposed that there should be no increase in the number of licenced outlets or their hours of operation. Similarly, no per capita increase in the capacity or size of licenced areas should be permitted, and increases in the number of licenced special events on campus would be limited. More attractive events without alcohol may be planned for annual special occasions such as during Orientation Week and during special weekends such as Homecoming. Strict policies on illegal drinking during sporting or recreational events should be enforced and, of course, the age-of-majority identification cards checked on all students entering outlets.

Universities should establish policies in these four policy areas but will need to adapt them to their own particular circumstances. This list is not exhaustive. The list described above was what we worked on at Western; some were implemented to a greater extent than others. There are additional policies that can be conceived and added to the list.

A major implication of these policies relates the role of bartenders and servers. They need to be provided with new information, different perspectives and clear expectations regarding their part in shaping drinking styles. Similarly, the focus on special events should be moved away from fund-raising by selling alcohol. The introduction of

differential pricing for low alcohol beverages was an innovation of the CAPE program. It gives drinkers additional incentives to lower both average consumption levels and the amount consumed per occasion by substituting low alcohol for regular alcohol beverages on a one-for-one basis. Differential pricing complements and reinforces the messages of the education component.

To develop and implement policy modifications at the University of Western Ontario took a good deal of leadership, negotiation, goodwill and persuasion. General principles have to be adapted to the reality of the situation without losing their impact and effectiveness. We found that the early participation and support of student leaders and tavern managers was critical. Many of the policy modifications also needed some explanation and clarification to the student body. None of the policies restrict the rights of individuals to drink as they choose as long as they are within the law. But the message is: if you wish to be a moderate drinker you can find attractive options: inexpensive, non-alcoholic drinks; light bottled beer and draft beer priced lower than the regular bottled beer; good snack foods available; and social events and entertainment where alcohol is not the central focus.

EVALUATION OF THE CAMPUS ALCOHOL POLICIES AND EDUCATION (CAPE) PROJECT

Louis Gliksman
Researcher
Addiction Research Foundation
London, Ontario

The evaluation we have developed for the Campus Alcohol and Education Project (CAPE) has been designed to determine whether the program, described in prior presentations, has had any impact on the students at the University of Western Ontario (U.W.O.). It is not intended to differentiate between the relative impact of the educational component and the policy component. If any effects are found, they would have to be attributed to the combination of the two distinct components. The evaluation consists of three separate phases: a pre-post test survey of first year students; a corner survey of second, third and fourth year students; and a comparison of archival data to observe shifts in drinking practices and reported alcohol-related problems.

THE PRE-POST SURVEY

I am a social psychologist by training, and so much of my background and many of my research interests are concerned with the relationship between attitude and behaviour. The model that I have utilized over the years, because of its clarity and its sufficiency, is that proposed by Fishbein and Ajzen (1975). Accordingly, many of the measures that I have used in this part of the evaluation have been developed so as to be consistent with this model. In order to determine the impact (i.e. the outcome of this particular intervention), we used a quasi-experimental design. It is a quasi-experimental design in the sense that we were unable to randomly assign students to the different groups, so we utilized a second university as the control. The second university that agreed to serve as our comparison site was McMaster University in Hamilton, Ontario.

McMaster was used as the comparison university for a number of reasons. Although somewhat smaller in size in terms of student population, it has the same sorts of faculties and departments, and its incoming first year population is roughly the same size, 3600, as that of U.W.O., which is about 4000. The most important consideration, however, was that the administration was willing to allow us access to their students and their records.

We obtained the registration lists of both universities in July 1984, and randomly selected 1500 students from McMaster and 1500 students from the University of Western Ontario: all were first year students. Students were selected so as to meet two criteria: (1) there were roughly 50% males and 50% females in each sample; and (2) each respondent resided in Canada.

Questionnaires along with an accompanying letter informing students of the intent of the survey were sent to all students selected. It should be noted that students were not exposed to any aspect of the CAPE program until late August, 1984, well after the pretest questionnaires were returned. One week after the questionnaire was sent, all students received a follow-up letter reminding them to return the questionnaire if they had not already done so, and thanking them once again. Return rates for the two samples, following this procedure, was around 60%. Of that, some were unusable because some students neglected to provide specific identifying information on the questionnaire. The information that I am referring to is their date of birth and the last four digits of their parents' telephone number. We requested this information because we sent both the pretest and posttest questionnaires to the same 1500 students in each university and wanted to match the pretest questionnaires with the posttest questionnaires, and still maintain individual anonymity. Since this information was to be our method of identifying our students anyone who did not include this information was excluded from the survey. The posttest questionnaire was very similar to the pretest questionnaire, in that we measured the same variables, but minor changes in wording were made in order to accomodate the fact that by the time the posttest was sent out, respondents had almost completed their first year of university.

The Questionnaire

The questionnaire that was sent out to all students took about 25 minutes to complete. It incorporated large segments of the Student Drug Information Survey (SDIS) (Gonzalez, 1981). We removed a number of items from the SDIS that were inappropriate for use with our particular sample and some that we found to be ambiguous. In addition, we changed the wording of some items that were grammatically incorrect. The SDIS includes some measures of attitudes that I think fit a very loose definition of an attitude, it has demographic information, it has behavioural data in terms of consumption variables, behavioural data in terms of problems associated with drinking episodes, measures of quantity and frequency, and reasons for drinking.

In addition to the SDIS, we have included a section that deals with student attitudes specific to the intent of the program. We asked students about their attitudes towards abstinence because that to us was a reasonable alternative to drinking. We asked them about their attitudes towards drinking and driving, towards drinking and academic activities, and towards various types of drinking (i.e. towards high-risk drinking, moderate-risk drinking, and low-risk drinking).

Also included in the questionnaire were frequency and quantity measures of usual consumption patterns, behaviour with respect to alcohol use, the amount of alcohol consumed on a daily basis in the week prior to the survey, and measures of behavioural intention. Again, our hope is that there will be differences between the Western students and the McMaster students on all of the variables described above. Because these measures focus on components highlighted by CAPE, any differences between these two groups on these variables could most reasonably be attributed to the intervention.

It is crucial from an evaluation standpoint that the two samples be similar. We have examined the pretest scores of the two groups and have found them to be almost identical. For example, we have examined the pretest consumption data based on the retrospective diary we asked them to fill out (i.e. their drinking for the past week, in terms of the number of bottles of beer, regular and low alcohol content, the number of shots of spirits, glasses of wine, and so on). Based on the definitions of different levels of risk associated with various levels of consumption established in our campaign, students were divided into the following categories: 1) abstainers; 2) no drinkers - even though they were drinkers they hadn't had anything to drink in the previous week; 3) 1-7 drinks; 4) 8-14 drinks; 5) 15-28 drinks; and 6) more than 28 drinks. The results of these breakdowns are shown in Tables 1 and 2 for U.W.O. and McMaster, respectively.

It is apparent from this data that the two samples are very similar in their consumption patterns, and also that we have heterogeneous samples in terms of drinking. In other words, the samples appear to be quite representative of the general student population.

Table 1
Number of Drinks in Week Preceding Survey
The University of Western Ontario

DRINKING LEVEL	FREQUENCY	PER CENT
Abstainers	48	6.6
0	148	20.3
1-7	260	35.6
8-14	128	17.5
15-28	109	14.9
29+	37	5.1

Table 2
Numbers of Drinks in Week Preceding Survey
McMaster University

DRINKING LEVEL	FREQUENCY	PER CENT
Abstainers	59	8.2
0	169	23.6
1-7	279	39.0
8-14	114	15.9
15-28	67	9.4
29+	28	3.9

Other variables that are included in the questionnaire, and that can yield important information about the impact of CAPE include behavioural indices such as the number of incidents they have had of hangover, nausea, missing classes, etc. In addition, we are obtaining behavioural intention data according to the specifications of Fishbein and Ajzen (1975) on students' intentions to participate in each of the risk behaviours that have been described in the core pamphlet.

Posttest differences in these variables will allow us to determine the areas in which CAPE is having its greater impact, and will provide information for future revisions and refinements in the program.

THE CORNER SURVEY

Although the CAPE intervention is primarily directed at first-year students, other segments of the student population will be affected in some manner. The entire university is affected by the policy changes in alcohol sales and distribution, and is also be exposed to the advertising that has accompanied the campaign. Accordingly, we will be conducting a random survey (in the form of an interview) of non-first year undergraduates at the end of March, 1985. Naturally, this survey will only take place at U.W.O.

We will be asking students about the drinking practices, whether they are aware of the CAPE campaign, how they became aware of it (i.e. through the booklet, newspaper ads, etc.), the aspects of the intervention of which they were aware, and what they thought of the idea of a campaign to encourage moderation in alcohol consumption. Not only will this information indicate how well the campaign has spread to a non-targetted sample of the population, but it will provide useful information about students' reaction to the intervention and to specific policy changes with respect to alcohol. In addition, the survey will tell us which of the advertising mediums has contributed most to the awareness of the campaign, allowing future interventions to focus on the use of the best advertising and distribution strategies.

ARCHIVAL DATA

Because of the emphasis of the campaign on behavioural criteria, two sources of data exist that may be useful in determining short-term impact. The first source of data is the records of the campus police. We will be going through the records of the campus police in terms of alcohol-related incidents. We will be breaking the data down on a monthly basis so that we can compare trends in alcohol-related incidents in the year before the intervention, the year during the intervention, and conceivably the year after this, while the intervention is in place. We will be looking at the frequency of occurrence of these incidents and also at the severity of the incidents on the assumption that severity and not frequency are most likely to be affected by a moderation in ethanol intake.

The second source of records is alcohol sales on campus; that is, beer sales, liquor sales and wine sales in each of the pubs on Western's campus versus those on the campus at McMaster. This data will tell us whether the campaign and/or the differential pricing have had any impact on the students' selection of light beer versus regular alcohol beer, and whether it has affected their behaviours in terms of quantity, frequency, etc. Because we are having trouble obtaining some of that data from the Brewers Retail (the primary beer distribution system in Ontario) (we have been told that the data are maintained on tape for a six-month period and then they disappear) we may have to go right back to the individual records of the pub managers themselves and obtain our data from this source.

The evaluation described above will provide information about both process and outcome, and has been designed within the limitations of doing research in the real world. Although designed to be as rigorous as possible, we have still encountered totally unforeseen occurrences. For example, there was a brewers' lockout which may have affected student drinking practices; a potential mail-strike forced us to mail our surveys

a little sooner than anticipated; and reluctance on the part of the pub managers to share their records have all served to confound the research to some extent. Each problem has been dealt with as it arose and the resulting evaluation will provide both valid and useful information.

ACKNOWLEDGEMENTS

The author would like to thank Cindy Smythe and Sandra Stiltz for the assistance in preparing the data and the administrations and students at the University of Western Ontario and McMaster University for their assistance in conducting the research.

REFERENCES

Fishbein, M. and I. Ajzen
1975 Belief, attitude, intention and behaviour: An introduction to theory and research. Reading, MA: Addison-Wesley

Gonzalez, G.M.
1981 The Bacchus Program Guide. A how-to manual for alcohol abuse prevention on Campus. (Unpublished manuscript)

DESIGNING PUBLIC HEALTH INTERVENTIONS TO REDUCE ALCOHOL PROBLEMS IN THE COMMUNITY

Ann E. Cox
Centre Director
Addiction Research Foundation
Toronto, Ontario

INTRODUCTION

Since the mid 70's a growing voice for 'prevention' has been heard in the alcohol field because of the increased awareness that treatment and rehabilitation of affected individuals will not solve our alcohol problems. While in the past several decades great strides have been made in treating individuals with health or other personal problems associated with alcohol consumption, particularly individuals with more severe problems, the fact is that those with chronic health problems are only a minority in our communities who experience problems related to alcohol consumption. Not only inveterate drinkers but many others are affected by the social, legal, personal and other consequences of use. In fact, since only about 10% of problem drinkers receive treatment, it may be unrealistic to expect treatment to solve alcohol problems.

The corollary to adequate treatment is prevention. Regrettably economic constraints have resulted in increased competition for diminished health care dollars which have sometimes pitted direct service providers against prevention and health promotion interests. Ontario's Health Promotion and Protection Act (1983) mandates the partnership between treatment and prevention in health care, in effect stating that preventive measures are key to public health initiatives, particularly with "lifestyle" diseases, including nutrition and diet, alcohol and drug abuse, and hypertension. This paper reviews the relevant literature, offers several working definitions, describes the role of alcohol control policies, and identifies major prevention strategies and some important program planning considerations for public health interventions to reduce alcohol problems in the community.

DEFINITIONS: BEYOND "DISEASE PREVENTION"

Public health models for prevention programs in what is often called "alcohol abuse prevention" reflect some key characteristics that, while sharing much with other health programs, are unique to the alcohol field.

Clearly the most important task in the prevention of problems associated with alcohol use is the question of what to prevent. Public health authorities generally focus on "disease prevention" models and strategies, however Room (1980) makes some useful distinctions among three prevention objectives which go beyond disease and disability prevention into areas of early or primary prevention. He notes that prevention may have as its objectives: 1. the reduction of "physiological/personal" health problems; 2. "casualty reduction" intended to deal with problems such as injury, death or property damage or loss resulting from consumption and 3. reduction or prevention of "social problems" defined as family or marital disruptions, neighbourhood peace and order issues, or perceptions of the drinking practices, habits, attitudes and behaviours of various cultural groups (Room, 1980).

Public health officials have responsibilities in each of these areas by virtue of their mandate to prevent disease such as high risk consumption leading to alcoholism; to prevent casualties associated with alcohol use such as fetal alcohol syndrome or on-the-job consumption; and to reduce community social problems resulting from inappropriate or health risk-taking activities, such as public inebriety or underage consumption.

There are a number of strategies which may be used, separately or in concert, to achieve stated prevention goals. Health promotion strategies are but one means to achieve the goals and it is important to note that the terms are distinct and not interchangeable. This and other strategies are discussed later in the paper.

ROLE OF CONTROL POLICIES

There are continuing problems associated with alcohol use in spite of increased treatment and rehabilitation capabilities which have been extensively studied and reported by alcohol policy researchers. The work of Popham, Schmidt, deLint (9) has focussed attention on the critical role of government control policies in altering availability and so moderating consequent problems. They and others note that alcoholics are only a minority among drinkers who consume at levels significant enough to impair health. We ought therefore to be more concerned with the association of consumption levels to health and other damage in the population, and with means to moderate consumption levels in the interests of public health and safety. Major elements that consistently show up in the literature which have implications for public health-oriented programs include the recognition that:

a. Alcohol related health damage in the population is directly proportional to consumption levels. Control policies to regulate availability are a necessary adjunct to measures to ensure adequate public health.
b. Treatment is a necessary but not the sole solution to reducing health risks and damage associated with use; preventive measures are an essential partner in community health.
c. The health perspective must include concern for the damage caused by casualties associated with use and certain drinking practices, and with disruption to the social fabric of communities.
d. Precise definitions of 'prevention' and precision in defining 'at risk' or other populations for prevention interventions are important to effective programming.

Government authorities including public health, safety and environment officials are responsible for regulating a host of conditions intended to reduce or prevent health and environment risks. Control policies are an important aspect of prevention programs; in the aggregate, they are estimated to have greater impact on public health than any other measure. In regulating alcohol use and therefore damage associated with consumption, the control perspective is usually identified with pricing, type and rate of outlets, and drinking-age laws. While measures to control availability are generally a provincial responsibility, power is vested in municipal authorities to exercise local options primarily but not exclusively related to zoning matters (Liquor Licence Act, rev. 1980). Examples include support for granting liquor licences, for location and type of liquor sales outlets, for health, fire and safety regulations pertaining to premises where alcohol is served and sold, and for law enforcement.

COMMUNITY BASED PREVENTION STRATEGIES MOST EFFECTIVE

The evidence in the literature is that community-based programs are most effective when dealing with health issues which are rooted in the norms and beliefs of the community. Issues include alcohol and other drug use, including tobacco, human sexuality, worker health and safety matters. Drinking is widespread in our society and will remain so; so health measures must take account of social customs related to use. There will continue to be health, social, and legal problems associated with drinking which will affect individuals whose consumption may not be chronic and for which effective prevention measures must be undertaken to reduce problems associated with its use.

Friedner Wittman notes that regulation of alcohol problems "includes individual and environmental components, linked together by a framework of beliefs, interests and policies" that usually affect more than one group in the community (1982, p. 7). Prevention programs which have been successful in changing public views and practices are those which have:

a. high levels of agreement from a wide range of community sectors
b. been mandated by public officials who have instituted the necessary regulatory supports
c. sustained public awareness campaigns which reinforce a single theme (e.g. alternatives to "at risk" use).

INTERDEPENDENCE OF THREE PREVENTION STRATEGIES

There appears to be an essential interdependence of three strategies requisite to effective prevention measures. These strategies are education, advocacy and legislation. Current developments in public health regarding prevention measures have tended to focus on one of these strategies more than the others, public awareness and health education programs being the most favoured. The advocacy process has been left largely to citizen groups and their lobbying efforts are perceived to be beyond the domain of public health agencies (until they are sometimes challenged to act by such interests). In reality planning must take account of all three strategies because there is ample evidence to suggest that each strategy itself is not sufficient for effect.

Evidence is most clear on the "education alone" strategy. It cannot do the job of changing attitudes, knowledge or behaviours by itself. It is also an extremely costly strategy. For educational measures to be effective they must be clear and credible, sustained over long periods of time, focussed and oriented to the target, and complement advocacy and legislative action.

Advocacy measures are those exemplified by citizen groups (lay or professional, elected or appointed) who champion specific measures or solutions on behalf of either their own membership or a disabled population. Whether it is an alcoholism, mental retardation or mental health constituency voluntarily advocating for changes, such groups act from a deep sense of commitment and personal experience that can focus public attention on problems in dramatic and effective ways. Although these groups may inadvertently alienate others by the sheer force of their commitment, advocacy may sometimes be the action that succeeds where more conventional or bureaucratic strategies for change may fail. Citizen advocate groups are a potent force in today's community change efforts, depending on their ability to increase community awareness and urge more

effective legislation. There is emerging evidence that alcohol use is in the mainstream of public consciousness and further that there is an increasing conservatism on the part of the general public supportive of moderation and even reductions in the consumption of alcohol.

Legislative or regulatory measures, with a public health orientation, are proving to be an essential ingredient in instituting changes in community behaviour. Policies regulating availability lend necessary support to ongoing education and advocacy efforts and the public health perspective is of course key to effective policy making. Public health authorities have a legitimate role to play in ongoing evaluation of the effects of liquor licencing practices in the community. The role ranges over public health inspections of licenced premises, serving practices, effects on neighbourhoods of the availability of alcohol (including prices, density and location of outlets, and per capita consumption); and on community health issues, which may be best managed by regulation, and not by individual, voluntary compliance.

In Thunder Bay, Ontario, a community alcohol management policy arose out of the concern of its citizens, elected officials, business and other interests, regarding acceptable policies for alcohol use in public places (Thompson, Douglas, 1983). Solutions to reducing alcohol problems in that community came about as a result of the interweaving of these three strategies, education, advocacy and legislation. This experience has been corroborated by policy researchers and programmers elsewhere in the alcohol field, notably in California (Wittman, 1982; Reynolds; 1984).

MATCHING STRATEGIES TO TARGET GROUPS

A major preoccupation of policy researchers and community programmers alike is the importance of precision in identifying target groups and matching them to appropriate interventions. Simpson and his associates at the Addiction Research Foundation identified "risk practices" associated with consumption, all of which have implications for public health interventions (1981). These risk practices include:

- High average consumption
- Drinking to drunkenness
- Drinking and driving
- Drinking and sports and recreational activities
- Alcohol use in pregnancy
- Consumption in the workplace
- Associated tobacco or cannabis use

These drinking practices result in problems to individuals and cumulatively become 'social' or 'casualty' problems which must be dealt with by public authorities in their various jurisdictions, whether as health care providers, school officials, law enforcement authorities or elected officials.

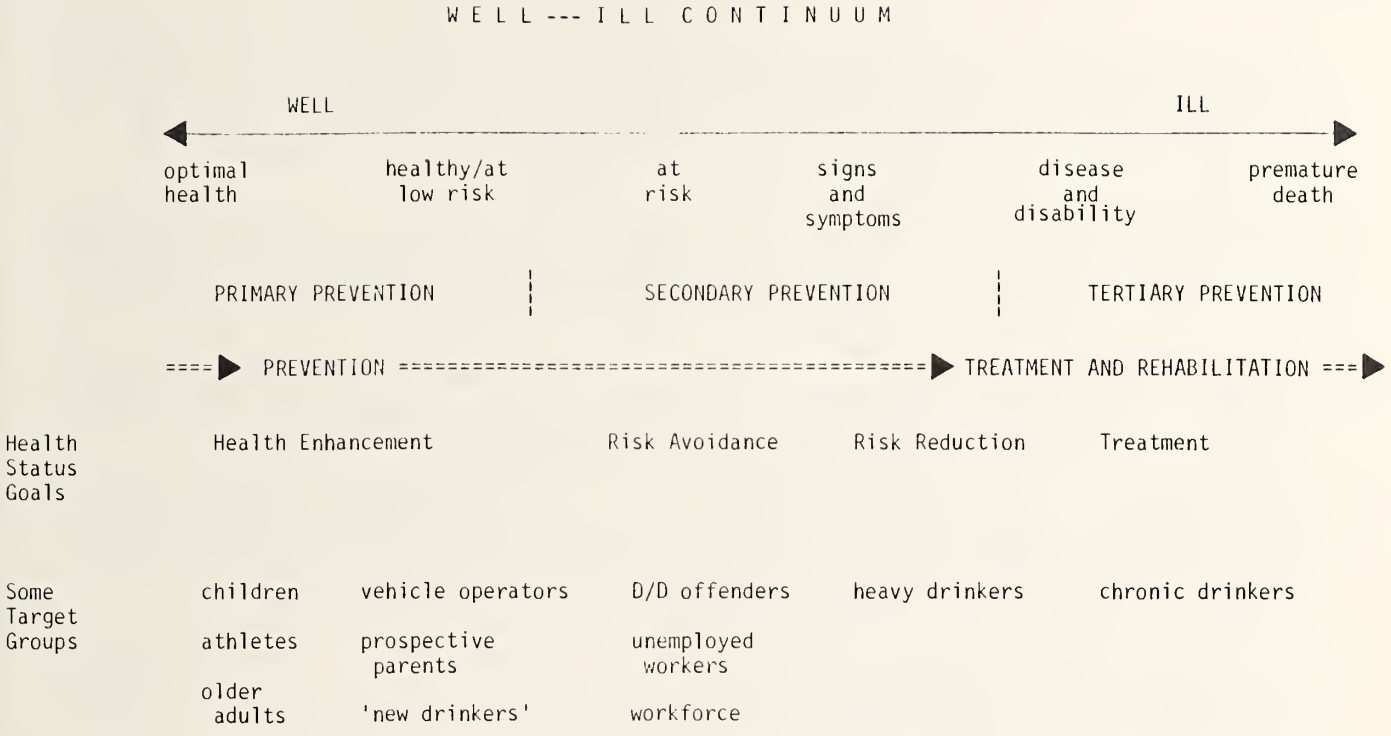
A careful review of local needs and program priorities will uncover primary targets. What is generally known is that young males under 30 are most at risk because of high average alcohol consumption. Women in child bearing years are more likely to experience adverse health problems associated with alcohol consumption. Adolescents' drug use particularly of tobacco and cannabis constitute a health risk which is increased by associated alcohol consumption. Proportionately more men and women over 55 are known to experience problems in combinations of alcohol and other drugs (usually prescribed medications) as their use of drugs increases due to increased health problems associated with growing older. Individuals in all of these target groups may be situationally at risk when they experience psychomotor impairment due to consumption. Thus it is possible to target specific interventions for a specific group based on local community surveys. Public health officials are only now beginning to develop a health data base that goes beyond measures of mortality and morbidity to include indices of at-risk behaviours which may be modified by well designed prevention programs (Figure 1).

EVALUATION CONSIDERATIONS

Demonstrated impact is necessary to have continued credibility with the community, with collaborating organizations, and with program funders. Health planners are concerned about the lack of hard data in prevention programming, especially in the alcohol field. It is imperative therefore to give careful attention to the evaluation process in the planning stages not only to clarify program goals and objectives but to specify concrete change measures.

Several routine methods of studying impact are available to health planners. They include evaluation measures ranging from non-intrusive monitoring to trend studies of aggregate data to quasi- and full experimental studies. Given the comparatively recent developments in the field of community-based alcohol research, the task of alcohol program researchers is to identify concrete indicators of impact and to set relatively shorter, time-limited program evaluation boundaries in order to keep within manageable bounds the number of predictably unexpected variables in any dynamic community environment.

FIGURE 1



Source: Health Promotion Model
Addiction Research Foundation, 1984

SUMMARY

Implications for Public Health Interventions: Planning for Results

It has been noted that effective programs for solving alcohol problems in the community have a number of characteristics to be considered by public health planners and programmers.

1. Alcohol use is imbedded in social and cultural norms; therefore realistic prevention strategies involve the reduction of problems associated with use, rather than prevention or eradication of use.
2. Treatment will not solve alcohol problems since not only inveterate or heavy drinkers but many others are affected by the social, legal, personal, and other consequences of use.
3. The availability of alcohol has a direct relationship to the extent of problems experienced by the populace. Public health interventions must take account of the relative impact of various control measures on the health of the community.
4. Public health programs to reduce alcohol problems in the community are likely to be most effective if the major strategies of education, advocacy and legislation are recognized as interdependent.
5. No planning is effective without precise definition of the problems to be altered (prevented or reduced). There are at least three prevention objectives to consider; namely whether the individual user, groups affected by use, or some aspect of the community environment is to be affected.
6. Credible public health program planning is built on a sound data base of measurable indicators reflecting local needs, problems and potential solutions.

Program planning must take account of real-world constraints experienced by policy makers and health planners. These constraints include competing program priorities; finite or diminishing staff and other program resources; a poor understanding of complex health problems and their solution by the diverse community interests that must be party to those solutions. Balanced against these constraints is the recognition that alcohol problems continue to exact a heavy toll on the community in terms of health, legal, personal and social damage. Fortunately public health authorities have the mandate, the concern and the will to provide leadership in resolving many of the problems associated with alcohol use in the community.

REFERENCES

Giesbrecht, N.
1984 "An Overview of Research and Policy With Regard to the Control Perspective on Alcohol Problems: A Canadian Viewpoint". In: Holder, H.D. and J.B. Hallam (eds.), Control Issues in Alcohol Abuse prevention: Local, State and National Designs for the '80's. Columbia, SC: South Carolina Community on Alcohol and Drug Abuse, p. 125-156

Popham, R.E., W. Schmidt, and L. de Lint
1978 "The Prevention of Alcoholism: Epidemiological Studies of the Effects of Government Control Measures" In J.A. Ewing and B.A. Rouse (eds), Drinking, Chicago: Nelson-Hall

Room, R.
1980 "Concepts and Statistics for the Prevention of Alcohol-Related Problems", Contemporary Drug Problems, 9(1)

Simpson, R. and B. Rush
1981 A Handbook for the Use of Consumption Statistics (internal document), Toronto: Addiction Research Foundation

Thomson, M. and R. Douglas
1983 "A Peek into the Black Box: A Policy Development Model for the Resolution of Social and Health Issues in Municipal Recreation", Recreation Research Review (July)

Wittman, F.D.
1982 "Zoning Ordinances, Alcohol Outlets and Planning: Prospects of Local Control of Alcohol Problems", NIAAA Grant (Revised: April 1982), Berkeley, CA

RESEARCH ON UNEMPLOYMENT AND DRINKING AS A BASIS FOR INTERVENTION PLANNING

Judith Groeneveld
Occupational Researcher
Addiction Research Foundation
Toronto, Ontario

The present high rate of unemployment has left close to 1,300,000 Canadians jobless. In Canada unemployment is not a new phenomenon. It has accompanied our economic system for decades. Between 1945 and 1975 the unemployment level was maintained at a relatively low level. During this period job opportunities were available for the great majority of those seeking employment. This trend changed during the seventies (Table 1). Since 1975 the unemployment rate has been climbing steadily. The recent recession deepened the problem and by 1982 the unemployment rate in Canada reached close to 13%, and close to 10% in Ontario. This high level continued through in 1984. Economic forecasts predict unemployment levels in the 11% range through 1985 (Conference Board of Canada, 1983). As a result of unfavourable labour market conditions between 1975 and 1985, a sizeable segment of the work force has been and/or will be exposed to repeated, possibly long term unemployment (Table 2). Some of those presently unemployed have already endured prolonged periods of joblessness, many without hope of a re-employment opportunity in the foreseeable future.

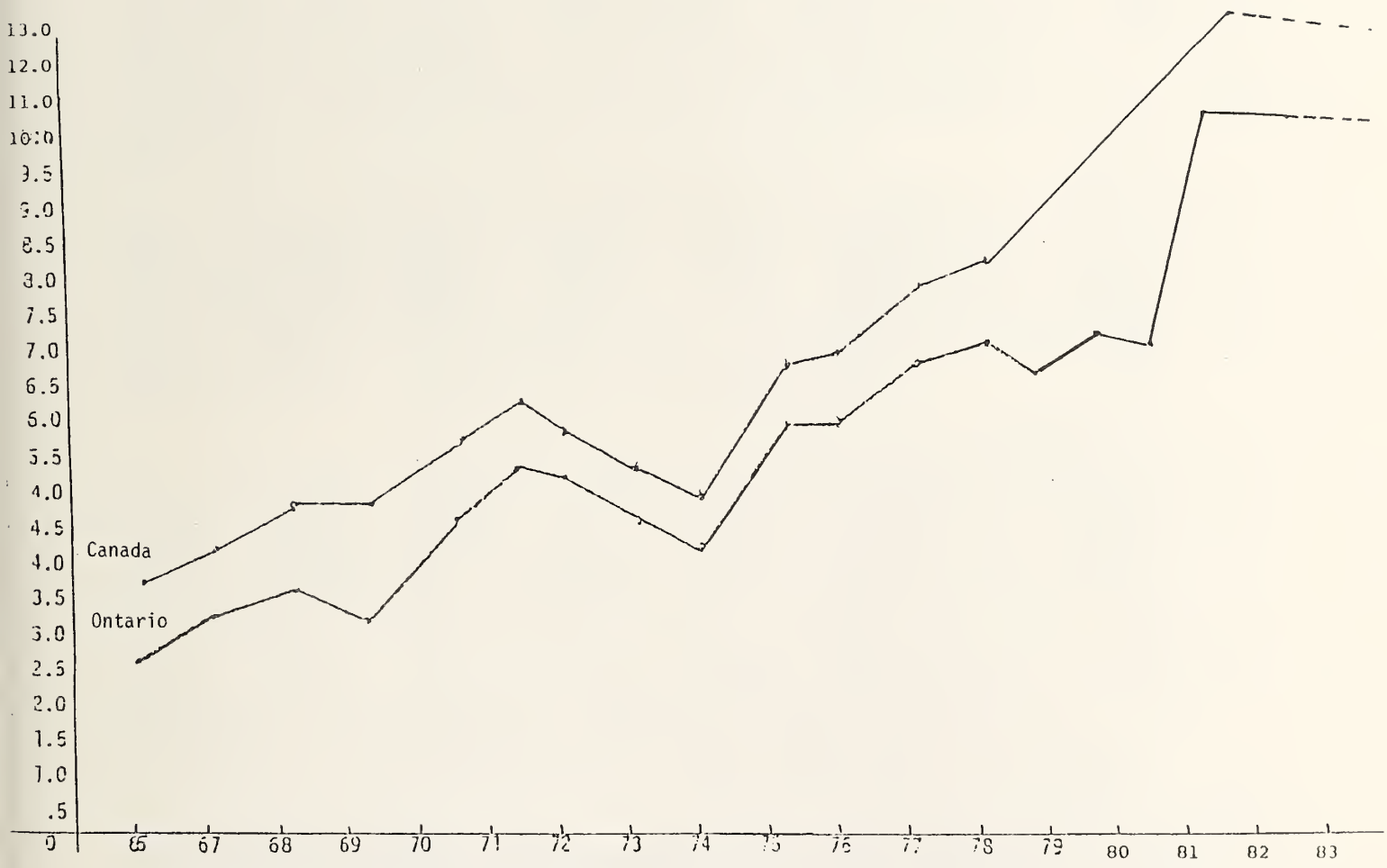
Considering the economic realities outlined above, it seems essential to understand how joblessness changes alcohol and drug use behaviour. Beyond doubt, without this insight, the development of effective public policies including intervention strategies and/or treatment facilities becomes an unattainable objective in the years to come.

EFFECTS OF JOB LOSS ON THE UNEMPLOYED

A review of the literature concerned with the effect of unemployment on the individual provides a somewhat disjointed picture. It seems that individuals are affected by the unemployment experience in different ways and to varying degrees. Research offers various explanations for this heterogeneous response to unemployment. Those advocating the social support theory postulate that individuals without extended social support systems are affected more by the unemployment experience (Moss, 1973; Cobb, 1976; Pieroni, 1980; Gore, 1978). Others feel that personality

Table 1

UNEMPLOYMENT RATES
Canada and Ontario
1966 to 1983



Source: Statistics Canada, The Labour Force,
Cat. 71-001, Ottawa
Data provided by Employment and Immigration
District Economists Office, Toronto

Table 2

Unemployment Rates by Sex and Age: Ontario, 1978-1982

Sex and Age	Unemployment Rates (%)				
	1978	1978	1980	1981	1982
Men					
15-19	17.5	15.1	17.1	16.0	22.2
20-24	10.2	9.2	9.7	11.4	17.6
25-44	4.2	3.9	4.7	4.1	7.6
45-64	3.9	3.5	3.6	3.4	6.2
65+	...a	...a	...a	...a	...a
Total	6.2	5.6	6.2	6.0	9.8
Women					
15-19	16.0	14.8	14.6	14.8	17.0
20-24	10.2	9.3	9.9	8.4	13.0
25-44	8.3	7.1	6.7	6.6	8.7
45-64	5.4	4.7	4.9	4.5	6.7
65+	...a	...a	...a	...a	...a
Total	8.8	7.8	7.7	7.3	9.8
Both Sexes					
15-19	16.8	15.0	15.9	15.4	19.6
20-24	10.2	9.2	9.8	10.0	15.4
25-44	5.8	5.2	5.5	5.2	8.1
45-64	4.5	4.0	4.1	3.8	6.4
65+	...a	...a	...a	...a	...a
Total	7.2	6.5	6.9	6.6	9.8

a) Any estimate that has a variability of more than 33.3 percent/or is less than 4,000 is not published by Statistics Canada.

Sources: Statistics Canada, Labour Force Annual Averages, 1975-1978, Cat. No. 71-529, Occasional (Ottawa).

Statistics Canada, The Labour Force, Cat. No. 71-001, Monthly (Ottawa).

traits are the determining factors. Individuals who are action oriented, confident, flexible, and able to face reality adjust better than those lacking the above traits (Slote, 1969; Sheppard, 1966).

Ferman's (1963, 1968) and Aiken's (1956) research suggests that the degree of economic deprivation suffered during unemployment will determine how well the individual can cope with the jobless state.

Pieroni (1980) examined the relationship between the psychological state of the individual during unemployment and the socio-economic environment. Three socio-economic factors seem to influence the psychological state. These are: the level of economic deprivation, the extent of social support, and the perceived employment opportunity. She postulated that there is a process involved in the unemployment experience, where the "unemployment causes psychological distress, resulting from changes in the economic and social milieu." Since the "socially sanctioned" means to reduce this stress, probably getting a job, is blocked, alternative coping mechanisms such as drinking or using stress reducing medication are sought by the unemployed.

The view that alcohol consumption can serve as a mechanism for coping with stressful situations aroused by socio-economic conditions has also been investigated by Perlin (1979). His research shows that the likelihood that alcohol is used as a stress reducing agent increases when anxiety induced by economic distress intensifies. He also showed that escape drinking will occur more often if the economic distress occurs in conjunction with a feeling of low self mastery.

Interest in the unemployment topic by alcohol researchers has not been very great. However, there are a few excellent reports providing insights into the dynamics of the alcohol consumption changes during jobless periods. The first one I would like to refer to is Giesbrecht's research, conducted in Sudbury during the 1978-1979 INCO strike (1982). His results indicated that during the strike period, the average per capita consumption of alcohol decreased by approximately 9%. Giesbrecht and his colleagues also noted that the alcohol consumption of 63.4% of the strikers did not follow the macro-pattern. These groups increased or maintained their consumption during the strike period.

The only recent Canadian study dealing with the relationship between unemployment and the change in alcohol consumption patterns during unemployment, was reported by Smart (1979). The findings of this survey indicate that in some cases unemployment periods are also periods of higher alcohol consumption. The increase in consumption during the unemployment period is closely but not exclusively related to the pre-jobless alcohol consumption pattern of the unemployed. During

unemployment alcohol consumption tends to increase among those who had alcohol related problems prior to losing their jobs. However, the risk of higher alcohol consumption through jobless periods is not limited to the problem drinker. Twenty-two percent of those participating in the study and reporting no pre-unemployment alcohol related problems also reported on increased alcohol intake during the jobless period.

Finally, Klein (1965) studied the alcohol consumption and the expenditure patterns of the long-term unemployed. He found that 9% bought more alcohol following lay-offs than they did when employed. Over time the size of the high consumption group decreased, and at the end of the 24th week period, only 4.8% reported increased post lay-off consumption of alcohol.

Examining the expenditure pattern of long term unemployed, Klein found that the marginal propensity to consume (MPC) approaches unity as unemployment continues. By the time people are unemployed for as long as twenty-four weeks, the MPC is more than 0.95 for those without liquid assets and 0.73 for those with liquid assets. That is to say, the first group reduced expenditure by 95% for every dollar reduction in income and the second group by 73%. He found that households in which the main wage earner became unemployed used varying economic adjustment methods such as: a. debt adjustment - borrowing; b. asset expenditure; c. expenditure reduction; and d. income increase by assuring a job for the other members of the family. Klein found that the economic adjustment took the following pattern twenty four weeks after lay-off:

a. debt adjustment was used by 11%
b. asset expenditure was used by 22%
c. expenditure reduction was used by 66%

Unfortunately Klein did not provide data on the relationship between income adjustment and change in alcohol consumption patterns.

THE EFFECT OF UNEMPLOYMENT ON ALCOHOL CONSUMPTION

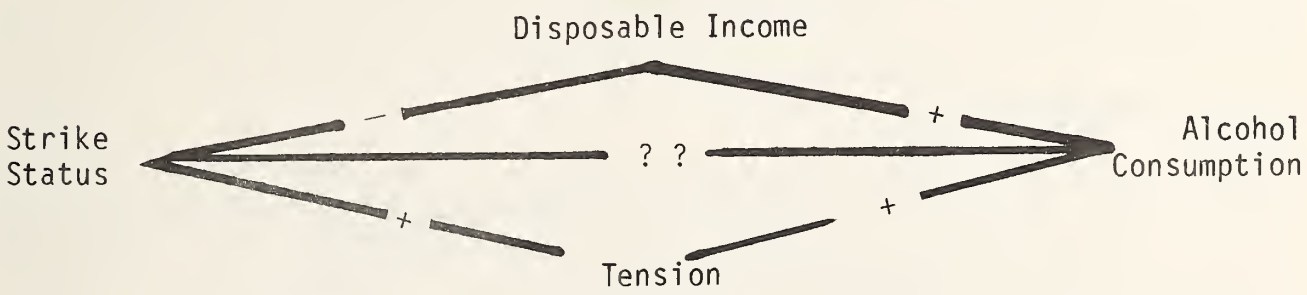
The two theoretical approaches relevant to the topic are the Availability Perspective and the Integration Perspective. These were eloquently summarized by Giesbrecht (1982). He writes: "The Availability Perspective: This orientation is closely linked to the distribution of the consumption model presented by Ledermann and elaborated and tested by de Lint and Schmidt, Skog, and others. Two important tenets of this perspective are the relationship between the availability of alcohol and aggregate consumption, and the relationship between the aggregate consumption level and the proportion of heavy consumers in a jurisdiction.

... if the availability of alcohol is increased, then the rate of consumption is likely to increase; and an increase in the proportion of the population at hazardous levels is positively related to a higher rate of consumption" (1982, p. 24).

The Integration Perspective stems from a different conceptual orientation. Writes Giesbrecht, "According to this perspective, conflicting drinking norms, inappropriate drinking styles and the mystification of drinking are key factors in heavy alcohol consumption. ... this orientation ascribes importance to variables such as anxiety, mixed messages, tensions and ambivalence in seeking explanations of heavy consumption. Higher consumption during periods of increased tension might be seen as supporting this perspective and being indicative of a higher incidence of heavy drinking" (1982, p. 24).

Giesbrecht et al (1982) argue that the two theoretical orientations lead to divergent expectations when predicting the effect of a jobless state on alcohol consumption. The Availability view leads to an expected decline in consumption, given a reduction in economic accessibility to alcohol; and the Integrationist view leads to an expected increase in consumption when social tensions are elevated and there is increased leisure time for a substantial proportion of the adult male population. (198?, p. 24). This dichotomy expressed in diagram form as follows (Giesbrecht, 1982, p. 25):

MODEL 1



AN ALTERNATIVE INTERPRETATION OF AVAILABILITY AND INTEGRATIVE PERSPECTIVES

The interpretation of the existing research results becomes less cumbersome when the theoretical frameworks are perceived in a less polarized manner. An alternative way to perceive the Integrative and Availability perspectives is by treating them as different components of the same process, or from a "Process Perspective". Using the Process

interpretation one can argue that during extended periods of unemployment both the Integrative and Availability principles are at play but they are influential at different stages of the unemployment process. Since only the Availability notion is linked to disposable income, the alcohol consumption of those unemployed individuals (or households) whose disposable income is lowered, is expected to decrease. In cases where income is not constrained, changes in consumption pattern are governed by other factors. The dynamics of these changes still have to be identified through future research but it is expected that they are factors advocated by the integrationists; anxiety, utility, stress and substitution of other activities, such as work with drinking. Socio-economic and psychological conditions identified by Bakke (1940), Pieroni (1980), Ferman (1963, 1968), Pearlin (1979), and Moss (1973), could also effect post lay-off drinking habits.

It seems that economic adjustment might be the key to understanding the changes in alcohol and drug consumption patterns during unemployment. The hypothesized interaction between alcohol consumption and economic adjustment is presented below.

PROCESS PERSPECTIVE

As pointed out earlier, there are different economic adjustment approaches which can be utilized by households when the main wage earner is laid off; 1. substitution from savings, borrowing and from secondary income sources and 2. expenditure reduction. A graphic representation of the hypothesized adjustment process and its effect on alcohol consumption is shown in Figure 1.

1. Pre-Jobless Period

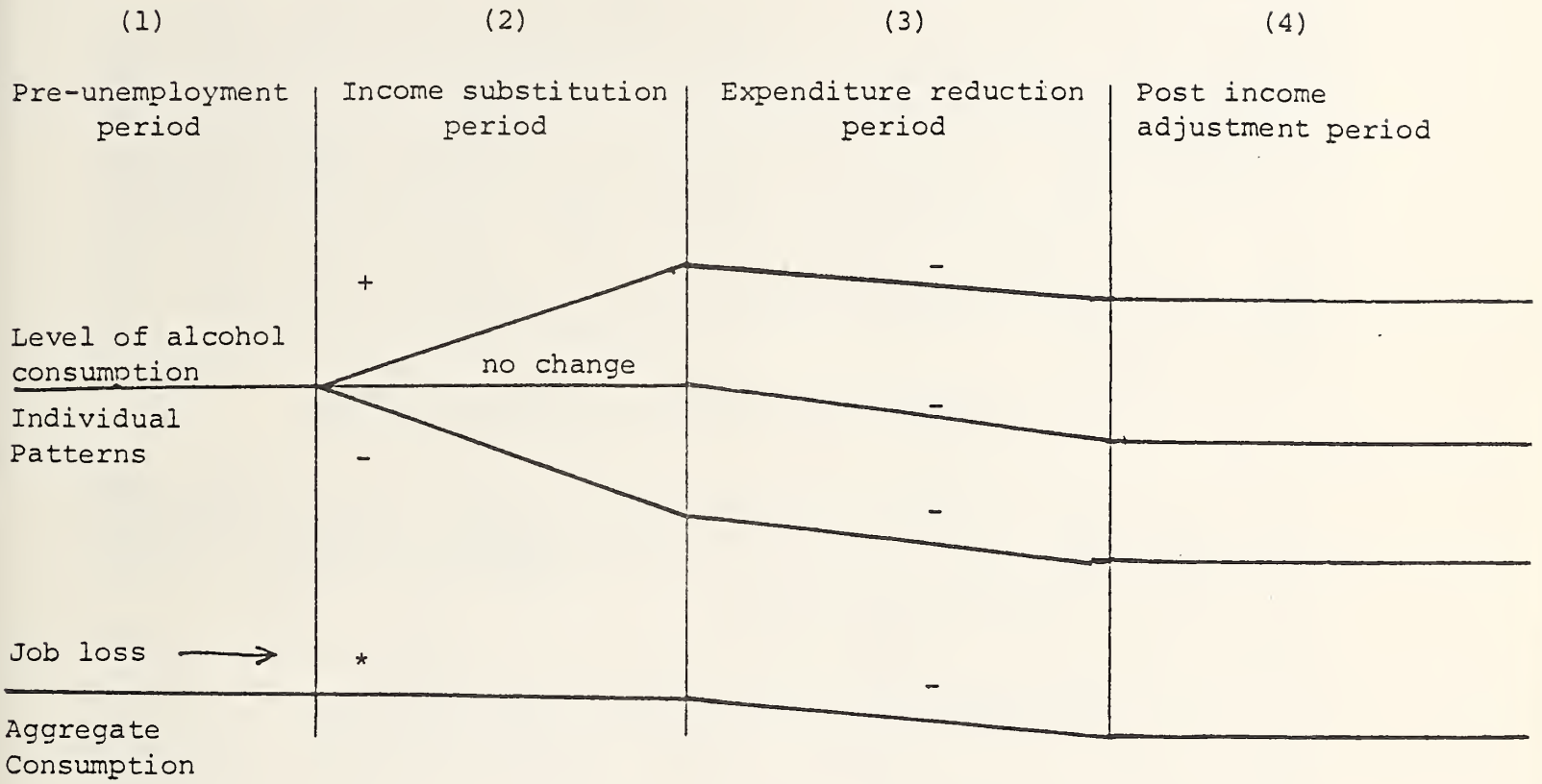
During this period the relationship between disposable income, alcohol and/or drug consumption is likely to be determined by the level of utility the individual derives from the use of these commodities. The level and manner of alcohol consumption at the beginning of unemployment is closely linked to the consumption level in this period.

2. Income Substitution Stage

The unemployed have a number of options in adapting to the economic realities of a jobless state, one of which is by supplementing their income. During this stage money allocated for essential goods such as food, shelter, and alcohol for some, remains relatively unchanged. As a consequence the change in alcohol consumption has to be attributed to non-income related factors, probably those advocated by the

FIGURE 1

Affect of Income Adjustments on Alcohol Consumption



+ increase in consumption

- decrease in consumption

* the level of aggregate consumption depends on the magnitude of substitution.

Integrationists: anxiety, utility, stress and substitution of another activity (like work) with drinking. One would expect, for example, that escape drinking would occur more frequently during this period than in other stages, since the economic constraint which limits consumption is not yet in operation while the stress of the unemployment process is already in existence.

3. Expenditure Reduction

The next stage sets in when income supplementing is no longer possible or is seen as an alternative. A number of factors can precipitate this situation, such as the depletion of credit or other assets, the realization that finding a new job might take longer than expected, and the loss of a job by the second wage earner, to mention only a few. As disposable income allocated to essential goods decreases, MPC approaches unity. As predicted by the Availability notion, a decrease in purchasing power limits the accessibility to alcohol, which, given sufficient adjustment time, brings about a decreased consumption pattern. The initial attempt to substitute cheaper brands might slow down the short term adjustment.

4. Post Income Adjustment

Stage four reflects a new equilibrium, when the proportion of income spent on alcohol and/or drugs is maintained until income is changed again, and as in stage one, the relationship between disposable income and alcohol consumption is determined by the level of utility the individual derives from the use of these commodities.

The interpretation of the cited literature (Smart, 1979; Klein, 1965; Giesbrecht et al, 1982) is simplified when viewed from the Process Prospective. The heterogeneous alcohol consumption pattern reported by Smart may be perceived as a reflection of the participants' non-uniform income adjustment behaviour. Those who reported no change or increased their consumption made the income substitution type of economic adjustment, while the others chose the expenditure reduction route. Klein's findings can be interpreted the same way. During the initial stages of unemployment, income substitution was more frequent and as a result alcohol consumption was increased by 9% of the participants. Later, as MPC increased, the spending on alcohol and other goods decreased. Similarly, in Sudbury, as the strike period lengthened, the number of residents who had to resort to expenditure reduction increased, and as a consequence, the total expenditure decreased thereby pushing aggregate consumption to lower and lower levels.

One important aspect to consider is that probably not all of those who are unemployed will move through both stages. Those with very few assets will have to make a swift adjustment to their new economic realities and might be forced from a pre-unemployment equilibrium to an expenditure reduction stage very rapidly. On the other hand, those who earn non-wage income can maintain a pre-unemployment spending style for prolonged periods.

Since high levels of unemployment are seemingly becoming an accepted phenomenon rather than an exception, we must understand the effects of job loss on the unemployed and their families. To achieve this we must engage in more creative research. Only then will we be able to generate the presently lacking, but badly needed, knowledge to formulate intelligent social policies which will help rather than hinder a comprehensive drug and alcohol intervention program for the unemployed.

REFERENCES

Aiken, M., A. Ferman, and L. Sheppard
1968 Economic Failure, Alienation and Extremism. Detroit: The University of Michigan Press

Bakke, E.W.
1940 Citizens Without Work. New Haven, CT: Yale University Press.

Cobb, S., and S. Kasl
1977 "Termination: The Consequence of Job Loss", National Institute for Occupation Safety and Health. Washington, D.C.: Government Printing Office

Ferman, L.A.
1963 "Death of a Newspaper: 1963", Kalamazoo, Michigan: The W.E. Upjohn Institute for Employment Research

Ferman, L.A.
1968 "The Hard Core Unemployed: Myth and Reality". Unpublished paper presented at the Hardcore Unemployment in Poverty: Problems, Policies and Programs Conference, West Virginia

Giesbrecht, N., G. Markle, S. Macdonald
1982 "The 1978-79 INCO Workers' Strike in the Sudbury Basin and Its Impact on Alcohol Consumption and Drinking Patterns", Journal of Public Health, 3:1, p. 22-37

Gore, S
1978 "The Effect of Social Support in Moderating the Health Consequences of Unemployment", Journal of Health and Social Behaviour, 19, p. 157-165

Klein, P.
1965 Financial Adjustments to Unemployment. London: Columbia University Press

Moss, G.E.
1973 Illness, Immunity and Social Interaction. New York: John Wiley

Pearlin, L.I. and W. Radabaugh
1979 "Economic Strains and Coping Functions of Alcohol". American Journal of Sociology, 82:3.

Pieroni, Rita, M.
1980 "Factors and Predictions Underlying Psychological Distress During Unemployment". A Ph.D. Thesis, Toronto: York University

Sheppard, L.H. and A.H. Belitsky
The Job Hunt. The W.E. Upjohn Institute for Employment Research. Baltimore, MD: The Johns Hopkins Press

Slote, A.
1969 Termination: The Closing at Baker Plant. New York: Bobbs-Merrill

Smart, R.G.
1979 "Drinking Problems Among Employed, Unemployed and Shift Workers", Journal of Occupational Medicine, 21(11), p. 731-736

A CASE STUDY OF THE TRANSITION FROM ALCOHOL TREATMENT TO ENVIRONMENTAL CONCERNS

Connie Weisner
Researcher
Alcohol Research Group
Berkeley, California

This paper presents a case study which looks at alcohol treatment providers as a constituency group for primary prevention. The case describes the transformation of a county's interest from traditional treatment and secondary prevention to primary prevention issues. It concerns the gap between that shift in interest and the problems inherent in identifying and implementing specific strategies. The changes occurred because of new drinking/driving legislation and resulting social policy which shifted responsibility for the handling of this alcohol problem from one system to another. It also discusses issues which relate to the broader discussion of problems in implementing primary prevention strategies. It focusses on alcohol treatment providers because they frequently are overlooked as a prevention constituency even though they have a larger ownership in the handling of alcohol problems.

DESCRIPTION OF COUNTY

In California, as in many U.S. states, the public alcohol treatment system is organized at the county level. Most urban counties have from fifteen to twenty county-operated or contracted programs, many of which are small, community-based. In addition to the public programs, there are private programs, usually hospital-based, which have greatly grown in number due to changes in health insurance which have increased coverage for alcohol treatment (Regional HSA, 1984A; U.S., NIAAA, 1983). These private programs operate independently from the County Alcohol Program Administration. The study county has twenty public alcohol treatment programs, many of which have become populated by drinking drivers in the past few years.

TRADITIONAL APPROACHES TO PREVENTION

As recently as three years ago, there was no significant prevention agenda in the county, or in most other California counties. Treatment providers often considered prevention, as it was defined at that time, to be in contrast with the disease concept of alcoholism upon which most

programs were based. A primary prevention concept did not exist, and any secondary prevention education efforts addressed the topic of alcoholism rather than raising the issue of alcohol problems.

In addition, the Community Alcohol Advisory Boards, the bodies responsible to the County Boards of Supervisors for overseeing alcohol programming, historically have been more critical of funds spent for prevention than for treatment. When prevention programs have been considered, questions of effectiveness consistently have been raised, which has not been the case for treatment programs. There has been a hesitancy to put money into prevention without proof that it would work, even though treatment programs continued from year to year without attempts to evaluate them, and new ones began without structured plans to do so. In a 1981 survey of agencies in the county, prevention was considered to need much more accountability to warrant funding than treatment was (Weisner, 1982). The prevention that existed was mainly in the form of education, usually consisting of talks to high school classes and some peer counselling. Treatment providers competed for small additions to their budgets for education, but it was seen essentially as a casefinding tool. This same purpose of education was also found in the private programs, where the competition for clients was increasing due to the program growth in that sector. While private programs in several counties made offers to the county alcohol program administrations to provide the prevention/education function as a service to the county, for the most part, these efforts turned out to be marketing exercises for the agencies rather than education. Within the public programs, early intervention for those considered to be at risk, such as co-alcoholics or drinking drivers (DUIs), was sometimes labeled prevention.

CHANGES IN THE HANDLING OF DRINKING DRIVERS

Due to Proposition 13, the California initiative which reduced property taxes and ultimately resulted in reductions of funds for social services, and due also to new federal and state funding arrangements early in the 1980s, treatment programs came under pressure to find additional funding. In most cases this meant charging fees. Around the same time, in 1981, California passed new drinking driving legislation (AB 541), which mandated jail or treatment for first offenders. Seeing this as a way to bail out their programs, many public alcohol treatment providers effectively lobbied for the DUI contracts. Indeed, the study county had 4500 first offender drunk drivers in its alcohol treatment system in 1983, and went from having client fees representing 8 percent of the overall alcohol budget in 1981 to almost 40 percent in 1984 (Weisner, forthcoming). Most of this increase in client fees came from DUI fees (Weisner, 1984). This has been similar for the state as a whole (Butynski, 1983; NASADAD, 1984).

However, the onslaught of the new clients had dramatic effects on the programs and eventually caused attitudes toward prevention to change. First, it put the alcohol treatment system into the public eye as never before; it gave alcohol programs and the alcohol treatment system a new visibility. Mothers Against Drunk Drivers (MADD) provided stories of multiple offenders who had been through alcohol programs unsuccessfully. Treatment programs which had never been accountable in the past were now called on to explain how they could be effective. Second, other institutions became more observant of alcohol programs. For example, as in other counties (and some other states as well) the criminal justice system was overloaded with the new drinking driver offenders and talked about needing a new jail (National Institute of Justice, 1985; Forensics Forum, 1984). The County Board of Supervisors looked at alcohol treatment as a less costly alternative, but demanded accountability. Third, even though functions were never officially clarified, as events evolved and by the fact of treatment agencies having taken on the problem, it became clear that county government and even the public expected the treatment programs to solve the drinking driving problem, not just to treat those who had been arrested. Treatment programs themselves were not clear about, and certainly didn't articulate, where the boundaries of their responsibility should lie.

The irony of this was that when alcohol programs had tried to take "alcoholism" as a problem to the community in preceding years through education, the public was not very interested. When the interest finally came, it was greater than they had hoped for, but it was in the arena of "alcohol problems", and treatment programs were susceptible to charges of failing.

SHIFTS IN CONCEPTIONS OF PREVENTION

As the alcohol agencies increasingly felt on the line, and because they also felt responsible for larger areas of the problem than they had actually taken on, the tenor of discussions dramatically changed. They realized that the DUI problem was much bigger than their after-the-fact approach could handle. Accidents and other incidents which involved people on their first DUI whom providers never had had a chance to treat, caused them to realize that some sort of community intervention needed to take place prior to any DUI offense. That naturally led to discussions of prevention. The sensational media attention to tragic teenage accidents caused the alcohol agencies to question where young people obtained liquor and how easy it was to get. This was indeed a different line of questioning than in the past. They also started looking at other targets of responsibility for the continuing problem such as alcohol outlets, the highway patrol (for not better monitoring the highways), the criminal

justice system (for its reputation of not following through with its jail mandate when people didn't follow treatment rules), and the media (for not presenting problems accurately). And, interestingly, the line of thought of modifying the environment to make it more difficult to drink fit more consistently with their alcoholism ideology than the more traditional secondary prevention philosophy did.

Providers' interest in prevention was also increased due to their experience of working with drinking drivers, many of whom they agreed were not alcoholics. It convinced them that there were alcohol problems that might be able to be prevented rather than there only being alcoholics needing treatment. The unfortunate part is that there was no device for giving direction to their interest when it came. The agencies donated money for prevention for the first time, but the county again took its main DUI prevention stand with yet another education program. However, they also began volunteer prevention councils in the different parts of the county with the hope that these groups would develop some interventions other than education ones.

ISSUES

From this experience it appears that alcohol treatment providers can be considered a potential constituency for activity in the primary prevention arena. In some communities, if the only political option for beginning a focus on alcohol problems is to start a treatment program, that action might be considered a viable first step. When the appropriate conditions occur, the traditional interests of treatment can indeed overlap with primary prevention. It means being prepared for the right issue to surface and having some kind of infrastructure to provide interpretation of the situation and direction for implementation.

Treatment providers are the group most directly concerned with the whole gamut of alcohol problems, and they will probably be around longer than anyone else to provide a base for continued efforts to exert presssure on policy makers and develop new issues. It is not feasible that counties will be able to employ cadres of people to fulfill that function separately in the long run. In the past, prevention funds have been the first to be cut during financial hard times. And having an outside group providing the prevention function runs the risk of treatment providers seeing that role in competition with their own.

I would suggest that there are ways of broadening the arenas of interest as well as shifting the frames of reference of treatment providers. Most important is to include them as colleagues in helping to develop and carry out primary prevention programs. If they are involved

in the development of a public health model for alcohol problems, it is more likely they will become invested in the process. Because of the experiences they have had grappling with the intractable problems of the people who have ended up at their doors, they have a basic understanding of the population to which prevention would be targetted.

Also, due to their experiences with treatment populations they have a wealth of information on contextual matters related to drinking problems. Alcohol treatment staff often have a knowledge of where the trouble spots are in their communities, how people get into trouble within them, of drinking patterns of different groups of clients, how different institutions handle problems, and how their own work overlaps with that of other institutions -- all the kinds of information necessary for planning prevention activities.

If this particular group of treatment providers could have one successful experience in changing policy (just stopping one new liquor store from opening or stopping one gasoline station from selling alcohol, for example), it is likely that they would have such a sense of accomplishment that they would become strong advocates and participants in primary prevention. In short, we need to look at treatment providers as we do at planners and other constituency groups, from the frame of reference of what might be their area of expertise, how they are invested in the problem and in solving it, how it affects them, and how they might develop the skills to continue to work on problems (Wallack, 1984). The important step involves moving from a single issue to involving more community participation for longer term planning and action. Strategies which might be considered include the following:

First, the providers have developed contacts with city and county governments in the process of obtaining and keeping funds which have aided them in getting drinking driving contracts and which can also be tapped regarding matters such as zoning and other legal issues involving alcohol. We often underestimate the amount of critical skills this group has developed through its dealing with the political process over time, mainly over funding issues. In this county, they have developed relationships with city and county governments both as a group and as individual programs.

Second, treatment groups could play a stronger role in influencing the media's focus on problems. Regarding the amount and type of media coverage over drunk driving, providers state that very little coverage of alcohol treatment for offenders has taken place, and that the coverage has not served to broaden issues as it could.

In short, treatment groups should be considered a strong potential constituency. They consider themselves the "owners" of the alcohol problem as they have defined it, and they have much at stake. One event that affects their work can serve to broaden their vision and strategies if it is given definition and direction.

I doubt whether any community is without events that can serve to develop a broader public health focus of alcohol problems among providers. These events could range from a drinking/driving incident, to a domestic violence incident to a public drunkenness incident. Instead of providing the usual after-the-fact treatment solution, it would prove interesting to engage treatment providers, along with other constituency groups, in redefining the issues and moving toward environmental solutions. It is likely that less major types of experiences also could have that same catalytic effect if the opportunity is taken to give direction. This particular drinking/driving example was significant enough that it caused a change in perspective in itself. And this experience of treatment providers having responsibility for an intractable problem which was broader than their usual strategies could handle, and for which the public and other institutions demanded results, was their "event". In this case, an event was a powerful catalyst in their willingness to redefine problems.

ACKNOWLEDGEMENTS

Preparation of this paper was supported by a National Alcohol Research Center Grant (AA-05595) from the National Institute on Alcohol Abuse and Alcoholism to the Alcohol Research Group, Institute of Epidemiology and Behavioural Medicine, Medical Research Institute of San Francisco.

REFERENCES

1981 Assembly Bill 541, State of California, Assemblyperson Moorehead

Butynski, William
1983 " State Resources and Services Related to Alcohol and Drug Abuse Problems: An Analysis of State Alcoholism and Drug Abuse Profile Data", Washington, D.C.: National Association of State Alcohol and Drug Abuse Directors, Inc.

Forensics Forum
1984 Forum on Drunk Driving. Criminal Justice Health Services, Health Services Department, California

National Association of State Alcohol and Drug Abuse Directors
1984 Alcohol and Drug Abuse Report: Special Report, April and May. Washington, D.C.: NASADAD

National Institute of Justice
1985 Jailing Drunk Drivers: Impact on the Criminal Justice System. Washington, D.C.: U.S. Government Printing Office

Regional Health Systems Agency
1984 Technical Assistance Paper. For submission to the office of Statewide Health Planning and Development in Fulfillment of Contract No. 82-30018, Oakland, CA

Reinarman, Craig
1985 "Social Movements and Social Problems: 'Mothers Against Drunk Driving', Restrictive Alcohol Laws and Social Control in the 1980s". Paper presented at the 35th Annual Meeting of the Society for the Study of Social Problems, Washington, D.C., August 23-26

Wallack, Lawrence
1984-85 "A Community Approach to the Prevention of Alcohol-Related Problems: The San Francisco Experience", International Quarterly of Community Health Education, 5(2), p. 85-102

Weisner, Connie
forth-coming "The Transformation of Alcohol Treatment: Access to Care in the Age of Drinking-Driving". Journal of Public Health Policy

Weisner, Connie
1982 Community Response to Alcohol-Related Problems: A Study of Treatment Providers' Perceptions. Berkeley, CA: Social Research Group

U.S. National Institute on Alcohol Abuse and Alcoholism
1983 Comprehensive Report. Data from the September 30, 1982 National Drug and Alcoholism Treatment Utilization Survey (NDATUS), Rockville, MD.

COMMUNITY PLANNING FOR RETAIL AVAILABILITY OF ALCOHOLIC BEVERAGES: PROSPECTS FOR PREVENTION OF ALCOHOL PROBLEMS

Friedner D. Wittman
Program Director
Prevention Research Center
Berkeley, California

EMERGENCE OF LOCAL INTEREST IN REGULATION OF ALCOHOL AVAILABILITY

Over the past decade, public health research has been steadily discovering connections between alcohol availability and alcohol problems (Bruun et al, 1975; Moore and Gerstein, 1981; Smart, 1982). Concomitantly, students of alcohol policy have been exploring implications in these findings for control of alcohol availability to prevent alcohol problems (Room, 1980; 1984). Considerable work has been done in the areas of controls for economic availability (Cook, 1981; Coate and Grossman, 1985); minimum purchasing age restrictions (Wagenaar, 1983); advertising (Wallack, 1983); and restrictions on physical-temporal access to retail alcohol (Hooper, 1983; Smart, 1980). Findings in much of this research give reason to believe that carefully-conceived controls on alcohol outlets can have planned preventive effects (see Room, 1984; and Smart, 1982, for summaries of the effects of control measures).

Focus on the preventive regulation of availability has looked primarily to state and national levels of jurisdiction as the sources of regulatory policy. Relatively little attention has been paid to the local level; that is, the city and the county. The rather few studies of which local jurisdictions are the main subject have been cross-sectional, aggregate studies such that it is difficult to scrutinize local processes of planning and administration for alcohol availability.

For their part, U.S. localities themselves have not been much attuned to issues related to alcohol outlets. Since Repeal in 1933, the main line of regulation has been through state agencies. The liquor control boards that oversee state marketing of alcoholic beverages directly, and alcoholic beverage control agencies that licence private entrepreneurs. Additionally, problems with alcohol have been viewed popularly as individual problems of alcoholism that require medical treatment of persons rather than policy treatment of alcohol outlets.

In the last few years, the equation has begun to change that has long accepted state-level control over outlets considered to be non-problematic. In the last decade in the U.S., state alcohol control authorities have weakened considerably as state governments have reduced state services generally, despite the fact that in many states, such as California, retail outlets have been growing at a faster rate than the population. Further, public health research into general population experiences with alcohol has broken the hegemony of alcoholism as the source of alcohol problems. As state authorities have weakened, and as concepts of alcohol problems have shifted, the city and county have begun to emerge as significant "players" in the increasingly-significant activity of controls over alcohol availability.

Presently, cities and counties in the U.S. are beginning to take a renewed interest in regulating alcohol outlets. In state plans from New York and California, state alcohol program authorities explicitly encourage increased preventive planning for availability at the city and county level. State alcohol control authorities also have called for increased participation in state licencing activities (Stroh, 1984). Cities have actually been more active than counties (Wittman, 1983), but generally, increases in local regulations directed toward alcohol outlets have been noted over the past few years (Wittman and Hilton, 1984; Wittman, forthcoming).

How exactly do localities go about regulating alcohol outlets, and what are the prospects in current trends and activities for the prevention of alcohol problems? This paper reports briefly on regulatory experiences among California cities, based on research done by the author and associates over the last four years.

NATURE OF LOCAL REGULATORY ACTIVITY

Cities and counties in California (as in all states in the U.S.) have Constitutionally-protected powers through their planning and zoning powers to shape the distribution of retail alcohol availability in the community. Planning and zoning ordinances are recognized by the California State Department of Alcoholic Beverage Control as controlling instate licencing determinations.

Cities and counties have a choice as to how they will use their local powers: they can be passive, granting zoning permits "as of right", without requiring discretionary review at the city level; or they can be active, reviewing each application for an alcohol outlet on its merits and in comparison to conditional use permit standards that the community may establish to ensure the "health, safety, welfare and morals" of the community's citizens.

Typical conditional use permit restrictions include minimum distances from other sensitive uses, such as schools, churches, and residences; disallowance of the sale of alcoholic beverages in gasoline stations; limitations on hours of sale, size of facility, amount of alcohol sold or displayed, and appearance to the street and to neighbours.

The most important thing about conditional use permits, however, is that they are discretionary. Communities can decide for themselves to limit numbers, types, locations, and features of operation of alcohol outlets.

EXTENT OF LOCAL CONTROL AMONG CALIFORNIA CITIES

Wittman and Hilton (1984) surveyed four hundred twenty-nine cities in California to explore the extent of local control activities directed towards alcohol outlets; 341 (81%) responded to a mailed survey. Approximately forty percent of cities do not require conditional use reviews; about thirty percent require conditional use permits for on-sale outlets only (e.g. bars, restaurants); while about twenty-nine percent require conditional use permits for on- and off-sale outlets both. Less than twenty percent of cities require both conditional use permits and special text restrictions on alcohol outlets. Factors most affecting the likelihood that cities will regulate outlets are the size of the city; its urbanicity; the percentage of alcohol retail licences of total retail licences; and (inversely) private home ownership.

Altogether these figures account for twenty-one percent of the variance in the regression analysis constructed from the data. It is fair to say that just a small fraction of California cities are using local ordinances to their full potential in the community. It is also fair to say that the small amount of explained variance indicates how little we know about the factors leading communities to use their ordinances, just as we know very little about the specific effects of the ordinances in preventing or ameliorating alcohol-related problems. However, local officials and community groups indicated high interest in the preventive potentials of local ordinances; almost one-third of the respondents wrote to request results of the survey.

SIGNIFICANCE OF LOCAL ORDINANCES FOR PREVENTION PLANNING ACTIVITIES

Local planning to set limits on the distribution of retail alcohol outlets provides opportunities to address a variety of local issues in the prevention of alcohol problems. Although the field has yet to document systematically and quantitatively the effects of local ordinances on

alcohol problems, one can say something about how the ordinances are being used. The ordinances' significance for prevention planning goes beyond their "bricks and mortar" regulatory aspect to link the presence of alcohol in the community to major community issues affecting social and economic life on a day-to-day basis. As communities confront difficulties with retail outlets, they come face to face with community level problems associated with alcohol problems generally, and they see how alcohol problems are emeshed in other community problems. Work on problems of retail availability of alcohol therefore can lead to a new start on community planning from the perspective of prevention of alcohol problems. A few case examples illustrate this:

Third Street Task Force

Liquor stores and other alcohol outlets predominant in this depressed commercial community along a one-mile stretch of street. Surveys of community leaders and residents, interviews with street drinkers and outlet operators, reviews of official policy for granting permits and policing outlets, all suggest a close link between the present outlets and the problems of conditional use permits.

As a result of a community wide prevention planning workshop, the Third Street Task Force in San Francisco was developed to address alcohol problems along Third Street, the major and only commercial thoroughfare in a poverty level minority community.

Current conditions have led the Task Force to advocate that the city require conditional use permits to restrict or to closely monitor future outlets; to develop a storefront presence and an in-area residential service for the Third Street Task Force's parent program's recovery services; and to change city policies for dealing with inebriates that have required expensive and futile use of police resources to provide "revolving door" trips downtown. These community level plans address both improved management of the alcohol environment and better services to individuals with alcohol problems.

These plans are also significant because they represent an attempt by area groups and organizations to improve Third Street, rather than to be displaced by developers who are beginning to take an interest in this area. However, obtaining changes in local ordinances and gaining program support through the city and state bureaucracies can be agonizingly slow. Poverty and lack of power to change one's neighbourhood go hand in hand. Problems predominate such that hope for positive development for current residents of the area often seem dim and the needs of people in the community, if they are recognized by the city at all, may be viewed as an unwelcome drain on resources.

After two years of frustratingly slow progress, the Task Force is about to be strengthened with a grant from the state's Department of Alcohol and Drug Programs. State money will provide a staff position to pursue the Task Force agenda which blends an assault on Third Street's alcohol problems with issues of community development, including changes in the city's planning and zoning ordinance. In the meantime, it is noteworthy that despite frustrations, the Third Street Task Force has stubbornly persisted on virtually no funding, for reduction of alcohol problems simultaneously with improvement of commercial and community life.

South Central Organizing Committee

A minority-poverty community in Los Angeles faced similar problems to the Third Street Task Force, but undertook a different strategy to obtain relief from alcohol-related problems that had become symbolic of problems of decorum, crime and violence associated with dope dealing, and problems of commercial services and economic development. Loitering in front of liquor stores became a major target of concern for local church and union groups organized by a foundation specializing in stimulating grass-roots action for community reform. Alcohol outlets were selected by community groups, in processes structured by the foundation, as a leading focus for change in the community.

Months of lobbying and mass rallies by as many as 3,000 people worked through the minimal support available from overburdened law enforcement and health department personnel to end up at the City Council.

The South Central Organizing Committee (SCOC) demanded zoning and restrictions on outlets rather than expensive and insufficient law enforcement. The South Central group saw clearly, as it tried various administrative remedies, that nothing would get the attention of outlet operators other than not letting them open or acting to put them out of business. After working with the city's planning department to develop an ordinance that is now being used as a model by the other California cities, the SCOC group for the past two years has been able to block 19 of the approximately 25 applications for permits to stores wishing to sell alcoholic beverages. The SCOC is also innovating techniques in the application of new ordinances to control existing outlets, a legally complex and politically difficult undertaking.

Successes with alcohol outlets have permitted the SCOC to expand to other community development activities. What began as an alcohol project has resulted in widespread grassroots support for additional community organizing activities. SCOC is now growing to the point of addressing community problems of jobs, education, housing, child care, and public safety.

Downtown Drinking in Oceanside

The city of Oceanside recaptured its downtown from a nearby U.S. Marine Corps training base as the Vietnam War wore down and as Marine trainee "claims" on the downtown bars loosened. A coalition of local legislators and police department representatives created a package of physical-temporal restrictions on drinking, monitored by specially-trained vice-squad officers to ensure compliance. Physical restrictions such as 1,000 foot spacing between outlets assured that the downtown area could "thin out" for redevelopment purposes.

This plan is generally working to Oceanside officials' satisfaction. It is comprehensive, applying to drinking on licenced premises as well as to drinking in public. Physical, temporal, and behavioural restrictions on drinking are enforced by police, planning, and local political decisions. Curiously, problems with rowdy drinking have occured at certain "better" restaurants (middle class, nationally known) which have become crowded drinking settings. Police enforcement of the new regulations extends to these places as well, as Oceanside citizens discover that the cleanup applies to all groups in the community.

Dampening Trendy Outlets on Union Street

A neighbourhood-commercial area of San Francisco, traditionally used as a utility shopping area by nearby residents, became trendy in the mid 1970's. This meant new, expensive, boutique-type stores, and a rapid rise in the numbers of alcohol outlets (from 38 to 56 outlets in five years). Rapid growth in numbers, types, locations, and alcohol sales volume contributed to creation of problematic behaviour along Union Street. As the outlets proliferated, rents increased, traffic increased, and tempers flared between long-time residents and newcomers over "their" neighbourhood.

The sudden onset of development along Union Street, echoed elsewhere in the city, stimulated the writing of a strict zoning ordinance aimed specifically at preventing sudden mushrooming of particular store types. As in the South Central case, additional police patrols provided only a short-term modest remedy. Genuinely preventive measures have to be obtained through use of the local ordinance. Now commercial-neighbourhood areas are being protected by "threshold" limits in the San Francisco planning code for new retail outlets in neighbourhood-commercial areas.

CONCLUSION

Taken together, these examples show several points to be considered in working with local ordinances for the preventive regulation of alcohol availability:

1. Presence of Many Outlets as a Factor in Outlet-Related Problems

Community-level problems of availability appear much aggravated by the presence of large numbers of alcohol outlets, large concentrations of them, and absence of monitoring of their operation. Application of planning and zoning ordinances might best be viewed from a genuinely preventive perspective: that is, keeping low the numbers, locations, and distribution of outlets in the first place. This will require serious planning to prevent outlets from increasing in numbers and infiltrating sensitive locations to the point that supervision is likely to be ineffective. Such preventive planning may require the full force of authority available to the city council (see Nicholson, 1975). Major political risks may be involved for so controversial a subject, especially when future problems due to present inaction are not immediately apparent.

Exercising power in such ways can make major contributions towards dealing with alcohol problems generally by addressing community norms and expectations in the use of alcohol. Identifying community standards on alcohol through such processes can lead to reflexive planning for alcohol availability that is able to deal effectively with both its positive and negative aspects.

2. Local Political Activity is Involved in Modifying Patterns of Alcohol Availability

Changes in physical availability involve political action; a preponderance of community groups must support proposed change, and must be involved in the decision-making processes that lead to the changes. Much mischief is possible here, but so is much excellent debate and planning. A city's insistence upon high standards of discourse and conduct regarding alcohol outlets is extremely important to well-accepted outcomes. The key appears to be the recognition of alcohol problems as inseparable from community problems, the solutions to which must be found through shared responsibility for various aspects of deeply-seated community problems with alcohol components.

3. Differing Beliefs, Practices and Histories of the Use of Alcohol Complicate Community-Level Planning for Prevention of Alcohol Problems

Stands taken on alcohol outlets mirror beliefs and behaviours about drinking that are held by the groups who are involved. Conflicts, ambivalence, confusion and cross-purposes that surface in disputes about alcohol outlets reflect larger societal patterns. Problems in planning for physical availability of alcohol accordingly must be taken as emblematic of deeper issues about the place of alcohol in the community. This is so particularly in the face of apparent community tolerance for high levels of damage to health and safety that come to be accepted without question as a necessary aspect of certain forms of availability.

4. Necessary Planning Information is Scarce

Community groups are often long on opinions and beliefs and short on facts about alcohol's effects, and about the impact of alcohol outlets on the community. Much better information systems are needed to track outlet performance in sales and in problems, both for research and regulation purposes (e.g. as Madison, Wisconsin has done; see Wittman, 1982).

Without well documented empirically-based findings, regulatory initiatives are highly vulnerable to court challenge. Additionally, community level education is important to alert community groups to take up planning activities; more attention should be given in the alcohol field to identifying the toll of alcohol problems upon communities (not just policies upon individuals), and to identifying the public health consequences of market forces positioning of alcohol on the community. Without this information, discussion in the planning process may degenerate into argument without foundation, and without positive affect in ameliorating community problems related to alcohol availability.

REFERENCES

Bruun, K., et al.
1975 Alcohol Control Policies in Public Health Perspective. Helsinki: Finnish Foundation for Alcohol Studies

Coate, D., and M. Grossman
1985 Effects of Alcoholic Beverage Prices and Legal Drinking Ages on Youth Alcohol Use: Results from the Second National Health and Nutrition Examination Survey, New Brunswick, N.J.: Rutgers University Press

Cook, P.J.
1981 "The Effect of Liquor Taxes on Heavy Drinking". In: M. Moore and D. Gerstein, (eds). Alcohol and Public Policy: Beyond the Shadow of Prohibition. Washington, D.C.: National Academy Science Press

Hooper, F.J.
1983 "Relationship Between Alcohol Control Policies and Cirrhosis Mortality in United States Counties", paper presented at Annual Meeting, American Public Health Association, Dallas, Texas

Moore, M. and D. Gerstein (eds.)
1981 Alcohol and Public Policy: Beyond the Shadow of Prohibition. Washington, D.C.: National Academy Press

Nicholson, J.
1975 Shetland and Oil. London: Wm. Lascombe, Publisher

Room, R.
1984 "Alcohol Control and Public Health", American Review of Public Health, 5, p. 293-317

Room, R.
1980 "Concepts and Strategies in the Prevention of Alcohol Problems", Contemporary Drug Problems, 9(1), p. 9-48

Smart, R.
1982 "The Impact of Preventive Legislation: An Examination of Research Findings". In: A.K. Kaplan, Legislative Approaches to Prevention of Alcohol-Related Problems, Washington, D.C.: Institute of Medicine, National Academy Press

Smart, R.
1980 "Availability and the Prevention of Alcohol-Related Problems". In: T. Harford, et al, (eds.), Normative Approaches to the Prevention of Alcohol Abuse and Alcoholism, Research Monograph No. 3, Rockville, Md.: National Institute on Alcohol Abuse and Alcoholism, p. 123-170

Stroh, J.
1984 Remarks by Director, California Department of Alcoholic Beverage Control, in speech to California Alcohol Advisory Board, Palm Springs, CA, March 4

Wagenaar, A.
1983 Alcohol, Young Drivers and Traffic Accidents: Effects on Minimum-Age Laws, Lexington, MD: Lexington Books

Wallack, L.
1983 "Alcohol Advertising Reassessed: The Public Health Perspective". In: M. Grant, M. Plant and A. Williams (eds.), Economics and Alcohol Consumption and Controls, London: Croom Helm, and New York: Gardner Press, p. 243-248

Wittman, F.D.
1982 "Madison, Wisconsin, Acts to Ameliorate Alcohol Problems", Drinking and Drug Practices Surveyor, 18, p. 61-63

Wittman, F.D.
1984 "Local Regulation of Alcohol Availability in Selected California Communities", Unpublished report prepared for Department of Alcohol and Drug Programs, under contract No. AA-0034-3, and by NIAAA Grant No. T32AA00772405

Wittman, F.D.
1985 "Local Control of Alcohol Availability: Issues for Planners", Berkeley, CA: Prevention Research Group (also forthcoming, Western Cities magazine)

Wittman, F.D. and M. Hilton
1984 "Uses of Planning and Zoning Ordinances to Regulate Alcohol Outlets in California Cities". In: Holder, H.D. and J.B. Hallam (eds.), Control Issues in Alcohol Abuse Prevention: Local, State and National Designs for the '80's. Columbia, SC: South Carolina Commission on Alcohol and Drug Abuse

ALCOHOL MANAGEMENT POLICIES FOR MUNICIPAL RECREATION DEPARTMENTS: APPLYING MARKETING PRINCIPLES TO THE PROMOTION OF LOCAL POLICY DEVELOPMENTS

Glen G. Murray
Regional Director
Addiction Research Foundation
Sudbury, Ontario

INTRODUCTION

It used to be that Ron Douglas and I would go to conferences and present on policy formulation at the local level and participants who had been involved in the national or international scene would scratch their heads and wonder where we were coming from (Murray et al, 1984). When we introduced social marketing concepts applied to the local perspective, they were convinced that we were at the wrong seminar and presenting the wrong material. However, in discussions over the past two days, marketing methods has been referred to as has policy development at the local, as well as the national, level. As a result, this symposium is particularly enlightening for us. We hope, in turn, that our presentations on the application of social marketing techniques to develop alcohol policy initiatives at the community level will contribute to the accumulation of knowledge already presented and to further knowledge of policy development.

In Northern Ontario, the staff of the Addiction Research Foundation are currently engaged in some exciting work in the alcohol policy field at the community level. This programming initiative began when the municipal government in Thunder Bay developed a policy to manage alcohol in city owned and operated parks and recreation facilities. The success of this venture has now broadened to a region-wide initiative to replicate local policy development in communities throughout Northern Ontario. It is in this programing venture that I have been able to work with the project staff in developing a social marketing framework which I will present below. Therefore, when I refer to "we", Ron Douglas will explain the intervention in more detail and Louis Gliksman will demonstrate the success of this community's policy initiative by reporting on the evaluation results of our work in that community. I will lead off the topic by introducing how marketing can be applied to the promotion of alcohol policy development at the community level. So look on this presentation as the first of a three part process.

APPLYING SOCIAL MARKETING TECHNIQUES

For years now, we have tended to look on the solution to increasing consumption and its related problems by discussing the ways in which we can limit availability of alcohol. Political and legislative decision makers by and large have not warmed up to the idea of limiting availability; in part no doubt because of the political implications of using these types of controlling mechanisms. Politicians may assume that control policies related to availability may be unpopular with the voters. In addition, we have also been preoccupied with the product of our efforts (the policy) rather than with the consumer (the policy makers). What we have begun to do in Northern Ontario is to tailor the policy development process to the needs of the consumer. This has resulted in an increasing adoption of the policy process by local decision makers. This subtle shift moved our role from 'sellers' to 'marketers', i.e. social marketers of alcohol policy, understood both as a policy outcome and a developmental process combined.

Social Marketing is defined by Kotler and Zoltman (1971) as "the design, implementation and control of programs calculated to influence the acceptability of social ideas". We have applied the notion of social marketing to the development of municipal alcohol policies for recreational facilities and parks.

Kotler and Zoltman suggest that acceptance of this idea of social marketing by the consumer (the policy maker in this instance) is dependent on considerable planning, communication and research. To illustrate this, I will highlight four aspects of social marketing theory which we applied to policy development viewed as a promotional activity. These include: corporate goals; market segmentation; product adoption; and, product life cycle. Since our exchange here today is rather informal, I will limit myself to a few concrete programing examples. For those of you who would like a more complete discussion, I refer you to our handout entitled "Social Marketing in the Alcohol Policy Arena: Some Considerations for Practitioners" (Murray and Douglas, 1985).

CORPORATE MISSION

In the past, the Foundation usually provided "best advice" to the provincial government level. It wasn't until we demonstrated the development of policy at the community level in Thunder Bay that our corporate goals broadened to include municipal governments as well (Addiction Research Foundation, Goal Statement No. 1, 1985). It now reads as follows:

> To support the development by various levels of government, but especially by the Government of Ontario, of an alcohol control policy and regulatory measures which take into account public health aims.

This was an important development in marketing terms since it offered organizational sanction to the development of a specific program initiative. This corporate sanction is critical to the development of supports within the organization. As a result of this development, researchers, who prior to this change exclusively provided policy advice, now became linked with programmers in the field in the communication of policy information and developmental processes. This has proven to be a successful collaboration, as we are experiencing here today.

From a social marketing perspective, our program staff now for the first time take into account the needs of the consumer. Or, as an automobile executive might tell us, "In order to sell cars, you have to decide on your product, who are your customers, and where you are going to sell them." In other words, we have begun to "position" ourselves in the market place of policy development.

SEGMENTING THE MARKET

Positioning in the market place depends very much on **segmenting the market** properly. Proper market segmentation is the second key concept in developing the marketing approach to the social policy arena. In our case, wanting to replicate the Thunder Bay example elsewhere in the North, we targeted local municipal politicians, recreationists, volunteer community leaders, the public in general, and the media. In each case, we developed psychographic profiles (a descriptive picture of the target member) of the people at whom we were aiming our programs.

In one case, we were able to identify one element which was common to politicians, practitioners, and volunteers alike. It was also central to the reason why Thunder Bay was motivated to develop its policy. That common denominator, that one unifying force, was a need for safety, safety from the risk of being held liable for any accident which might occur at a poorly managed event where drinking was involved. In the case of the educator and recreation consultant, it was a matter of conscience and professional integrity. The question was asked whether they were putting others in jeopardy or at risk because they hadn't provided proper training or consultation about the ways to manage alcohol in their particular recreational setting.

As a result, when we decided to introduce policy development to these potential consumers, we communicated the same message with subtle differences. Please note the letter in Figure 1 as an example of this communication.

As you can see, imagery used in the opening paragraph of the letter illustrates the risk of a seemingly uneventful social event developing into a problem situation for those responsible. It introduced, perhaps for the first time, the possibility that the member of the target audience could be sued as a result of an injury to someone attending an event. I have underlined this part of the letter to draw it to your attention. We believe that the possibility for liability caught the attention of our consumer market and made them reflect on the likelihood of their involvement in possible legal actions. However, we did not assume that each of the target markets to whom we were addressing our program would be motivated by the same message of liability. Each letter was altered to meet the perceived needs of the intended consumer and a total of six different letters with six different scenarios were sent out (Figure 2).

As you can see, each targeted consumer group had a message tailored to their need to avoid liability. As well, each individual within each of these groups received a personalized letter inviting them to attend an orientation workshop where further information would be provided. (As you must have gathered by now, this was done on the office wordprocessor, leaving me to sign several hundred letters of invitation.)

This kind of detail was worth it; the results were overwhelming. The one day orientation session was filled to capacity with more than one hundred municipal politicians, recreation practitioners, volunteers and educators in attendance.

Of course, in true marketing fashion, the letter was augmented by a promotional mix that included brochures, special presentations and media announcements. The letter of invitation and the orientation session should be viewed as only one part of a general marketing strategy. The posters (Figures 3 and 4) were distributed to numerous outlets where target audiences could see them.

Bring the Media Onside

We viewed the media representatives as both an intermediary target group and as a key consumer group for our information. We saw the media as a gate-keeper and as a setter of the community agenda. Therefore, we believed it was necessary to bring them onside with accurate and complete information as a method of accessing policy makers and raising the profile of the issue in the community. In all good marketing strategy there must

FIGURE 1

Letter 1
Municipal Politicians

Addiction Research Foundation

Northern Regional Office
Clonadge Building
144 Pine Street, Suite 203
Sudbury, Ontario P3C 1X3
(705)675-1181

Mayor T.S. Jones
30 Van Horne Avenue
Dryden, Ontario
P8N 2A7

Dear Mayor Jones:

CONSIDER FOR A MOMENT:

A spring dance is in progress at your local municipal hall. It is a beautiful evening, just perfect for a party. People are drinking, dancing, laughing and visiting with neighbours they haven't seen all winter. A young couple starts to leave and suddenly the wife reaches out to steady her inebriated husband as they descend the stairs. She loses her grip and he lurches forward, stumbles and falls. If he were to initiate a civil action suit, who would be held responsible, the husband alone, the dance organizers, the signatory on the Special Occasion Permit or would you, as a municipal politician, also be implicated?

The issue of alcohol use in combination with recreation and leisure is a topical one. The growing concern on the part of municipalities around the issue of litigation in instances such as the one described above, provides the opportunity for municipal leaders such as yourself to consider preventive options.

THE ADDICTION RESEARCH FOUNDATION, in conjunction with its **SCHOOL FOR ADDICTION STUDIES**, is offering a one day workshop on:

POLICY DEVELOPMENT TO MANAGE ALCOHOL

IN PUBLIC RECREATION FACILITIES

I realize that the responsibilites of your role as a municipal politician are many and varied and that one of the issues which confronts you regularly is the granting of permits for alcohol use in civically owned facilities. This one day workshop will outline the problems associated with alcohol use in civically owned facilities, will discuss some of the legal implications involved and will suggest possible solutions and alternatives. It will also outline the benefits of developing policy to manage alcohol. I know you will find this information useful in your municipal councillor's role.

Please accept this letter as my

PERSONAL INVITATION

to you to attend this workshop. Enclosed is an agenda and registration form.

If you have any questions about the workshop, please contact either:

Mrs. Joan Ruhnke (705)675-1181 or Mrs. Regina Caverson (705)675-1195

Addiction Research Foundation,
144 Pine Street,
Sudbury, Ontario
P3C 1X3

We look forward to having you join us in the day's discussions of this most important community issue.

Sincerely,

Glen G. Murray,
Director,
Northern Ontario Programs.

FIGURE 2

CONSIDER FOR A MOMENT:

A spring dance is in progress at your local community centre. It is a beautiful evening, just perfect for a party. People are drinking, dancing, laughing and visiting with neighbours they haven't seen all winter. A young couple starts to leave and suddenly the wife reaches out to steady her inebriated husband as they descend the stairs. She loses her grip and he lurches forward, stumbles and falls. If he were to initiate a civil action suit, who would be held responsible, the husband alone, the dance organizers, the signatory on the Special Occasion Permit or would you, as a recreation practitioner, also be implicated?

Letter 2
Recreation Directors

CONSIDER FOR A MOMENT:

A spring dance is in progress at a local community center. It is a beautiful evening, just perfect for a party. People are drinking, dancing, laughing and visiting with neighbours they haven't seen all year. A young couple starts to leave and suddenly the wife reaches out to steady her inebriated husband as they descend the stairs. She loses her grip and he lurches forward, stumbles and falls. If he were to initiate a civil action suit, who would be held responsible, the husband alone, the dance organizers, the signatory on the Special Occasion Permit or would a recreation practitioner, perhaps trained at your school, also be implicated?

Letter 3
Educators

CONSIDER FOR A MOMENT:

A winter carnival is in progress at your local playground facility. It is a beautiful day, just perfect for such an activity. People are skating, playing broomball with other neighbourhood families and warding off the chill with a brew. A young couple starts to climb aboard the hay ride but the inebriated husband falls under the runners of the sleigh and is injured. If he were to initiate a civil action suit, who would be held responsible, the husband alone, the signatory on the Special Occasion Permit, the city, or would you, as a member of the playground executive, also be implicated?

Letter 4
Volunteers/Playgrounds

CONSIDER FOR A MOMENT:

A ball game is in progress at a local municipal park. It is a beautiful afternoon, just perfect for such an activity. Spectators are enjoying the game, refreshments at the beer tent and visiting with friends and neighbours. A young couple starts to leave the stands and suddenly the wife reaches out to steady her inebriated husband as they descend the stairs. She loses her grip and he lurches forward, stumbles and falls. If he were to initiate a civil action suit, who would be held responsible, the husband alone, the event organizers, the signatory on the Special Occasion Permit or would you, as a Community Services Board member, also be implicated?

Letter 5
Volunteers/Recreation Board

CONSIDER FOR A MOMENT:

A spring dance is in progress at a local community center. It is a beautiful evening, just perfect for a party. People are drinking, dancing, laughing and visiting with neighbours they haven't seen all year. A young couple starts to leave and suddenly the wife reaches out to steady her inebriated husband as they descend the stairs. She loses her grip and he lurches forward, stumbles and falls. If he were to initiate a civil action suit, who would be held responsible, the husband alone, the dance organizers, the signatory on the Special Occasion Permit or would a recreation practitioner, perhaps one who consulted you for programming advice, also be implicated?

Letter 6
Recreation Consultants

FIGURE 3

A ONE-DAY WORKSHOP

SHERATON-CASWELL INN
SUDBURY

JUNE 6, 1984

Sponsored by

The School for
Addiction Studies

and

The Northern Region
Regional Programs Division
Addiction Research
Foundation

•

Registration

$10.00 per person

Payable to:

The School for Addiction Studies
c/o Mrs. Joan Ruhnke
144 Pine Street, #203
Sudbury, Ontario
P3C 1X3

•

Registration includes
lunch and
information packet

POLICY DEVELOPMENT TO MANAGE ALCOHOL IN PUBLIC RECREATION FACILITIES

FOR Recreation Directors,
Municipal Councillors,
Community Association Executives,
Recreation Educators

TOPICS Liquor Legislation
Legal Liability
Alcohol Management Policy

REGISTER NOW

NAME _____

TITLE _____

ORGANIZATION _____

ADDRESS _____

_____ TEL: BUS _____ RES _____

FIGURE 4

A ONE-DAY WORKSHOP

AIRLANE MOTOR HOTEL

THUNDER BAY

NOV. 30, 1984

8:30 o.m. — 4:00 p.m.

Sponsored by

Northwestern Ontario Professional Recreation Society

N.W.O.P.R.S.

in co-operation with

The School for Addiction Studies

and

The Northern Region Regional Programs Division Addiction Research Foundation

•

Registration

$20.00 per person

Payable to:
N.W.O.P.R.S.
c/o Donna Gilhooly
Thunder Bay Parks & Recreation Dept
950 Memorial Ave.
Thunder Bay, Ontario
807-623-2711

•

Registration includes lunch and information packet

LEISURE, LIQUOR AND LIABILITY:

Managing Liquor in Recreational Facilities

FOR Recreation Directors
Municipal Councillors,
Community Association Executives
Recreation Educators

TOPICS Liquor Legislation
Legal Liability
Alcohol Management Policy
Recreation/Community Responsibility

REGISTER NOW BY TELEPHONE (807) 625-2693 (Betty) BEFORE NOV. 26/84

NAME _____

TITLE _____

ORGANIZATION _____

ADDRESS _____

_____ TEL: BUS _____ RES _____

(PLEASE MAKE YOUR OWN HOTEL RESERVATION)

be an exchange relationship where the producer and the consumer feel they have gained from the exchange of goods or services. In the case of the media, the exchange relationship was complete insofar as they became an ally and a benefactor in our attempt to market the policy process. On the other side, they became recipients in the exchange relationship by getting news stories for use in their media outlets.

In order to understand the needs of the media in the North, our staff first did an audit of media services in Northern Ontario (Ruhnke and Douglas, 1983). As a result, we learned that we had a number of weekly as well as daily papers, whose needs we discovered, were quite different. For example, daily newspapers have staff available to cover a special event. Furthermore, these reporters look forward to the opportunity to do some investigative reporting; therefore they could attend our workshops to report on the proceedings as a news item (Figure 5). On the other hand, the smaller community weeklies had very few staff. These papers were prepared to provide coverage if the article was already written for them, if pictures were provided, and if it was relevant to local interest.

The Orientation Sessions

To reinforce the message, participants were given a certificate of participation (Figure 6). This also met the needs of those attending since many used such an acknowledgement to demonstrate professional development in their field.

You probably noticed from the posters depicted in Figures 3 and 4 that we ran two workshops. Not only was the first workshop in Northeastern Ontario deemed highly successful but many requested one in Northwestern Ontario as well, closer to home. In response, a second workshop was marketed to those unable to attend the first due to the travel involved, only this time, convenience of location was stressed, rather than the issues. Note the differences between our letter in Figure 7 and the original letter of invitation (Figure 1).

PRODUCT ADOPTION

The third principle we took from the marketing literature was the concept of the **adoption process.** According to the model, the potential consumer group may be divided into a number of sub-groups depending upon the time at which they adopt or purchase the product. It was our feeling that, since we were introducing a fairly new concept in our policy development work, the focus of our attention should be on the "early adopters". According to McCarthy and Shapiro (1979), these people account for approximately 15% of the market. They are the first to come on board and try a new product when it is introduced into the market place. Early

FIGURE 5

Rec workers get legal advice

← Front page news report and picture in daily newspaper. (by reporter)

THE CHRONICLE-JOURNAL, Saturday, December 1, 1984

By BRUCE LANGER
Chronicle-Journal Staff

(More seminar stories, Page 17)

Staff and volunteers of recreational organizations must become more aware of the legal implications of their work if they are to avoid lawsuits, said the president of the Institute of Non-Profit Institutions.

John Fisher said Friday the judiciary has been finding the executives of such organizations liable for actions.

"Look at the precedents and realize what the judiciary is saying about people who hide behind the corporate veil and who are acting irresponsible," he told 130 recreation workers and municipal officials attending a one-day seminar. "The judges are tending to make them more liable. That tends to shock people."

Fisher was speaking at a conference sponsored by the Addiction Research Foundation and the Northwestern Ontario Professional Recreation Society.

Fisher said more accidents occur at community halls, playing fields, pools and rinks than people like to think. Staff and volunteers have specific responsibilities and can be held legally liable by the courts for negligent behavior.

He noted a successful lawsuit against an association or municipality can eliminate or seriously damage the reputation of their programs.

To clarify the legal framework of negligence he trotted a number of legal definitions, including factors necessary to prove negligence and their causes.

The factors of negligence include an act which a reasonable man would have realized involved an unreasonable risk or injury to others and failure to perform an act which is necessary for the protection or assistance of another and which one has a duty to do.

Fisher listed 14 causes of negligence covering a wide range of actions or lack of actions on the part of a person responsible for an event.

Failing to use due care and to give adequate warnings of the danger of an act could be one cause, although Fisher noted posting notices of such dangers could help.

Failing to employ appropriate skill to perform certain tasks could be another cause for a negligence suit. Fisher noted courts judge recreation people on their knowledge and how that knowledge is being applied.

Also if such people are seen to be acting differently on the job than in private life that could cause difficulties in court, he said.

Negligent behavior must be the result of the proximate cause of injury before a jury or judge can sustain a damage suit. That means the negligent action of the volunteer or staff in charge of an event was the direct and immediate cause of the injury.

Negligence can be cancelled by uncontrollable circumstances, such as inclement weather even if the actions of the staff or volunteers were negligent. It can also be cancelled if an injured person failed to act prudently and if that negligence contributed to the accident. For example, if an impaired person was able to make a judgment on his condition, the liability could shift.

Fisher said the best protection against liability suits is for volunteers and staff to be informed of their potential liability. Also volunteers, as well as staff, should have job descriptions which outline responsibilities.

Waivers and consent forms are commonly handed out by associations to the parents of children participating in events. But there is a difference between the two, he said.

Waivers, in which a party relinquishes a right, are not legally valid. That's because an adult can't sign away the legal rights of a child and an individual can be held liable for his acts if negligence can be proved.

Instead of waivers, consent forms should be obtained as they show the child has the parent's permission to engage in an activity.

In the case of accidents, there is a duty to provide some form of first aid as the person in charge of children is acting in the place of the parent (loco parentis in legal jargon). Failing to act or acting improperly could lead to negligence charges.

Some tips to avoid legal entanglement include being alert to the possibility of accidents, properly supervising charges, having equipment annually inspected and obtaining a written report, not allowing participants to use faulty equipment, providing adequate space for vigorous activities, and securing facilities from participants and unauthorized people when supervision is not available.

SPEAKER JOHN FISHER
...explains legal implications

Item from weekly newspaper (Fort Frances Times) based on news release and a polaroid camera photo.

↓

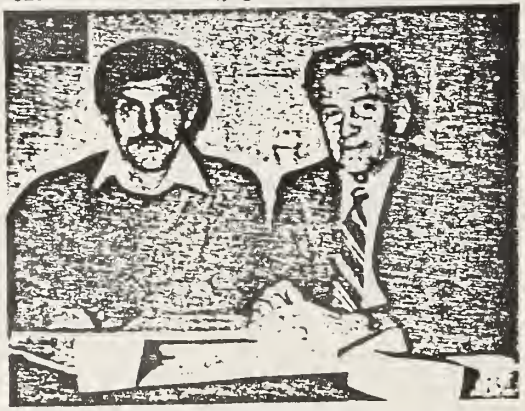
Recreation workers meeting researchers

"Leisure, Liquor and Liability" is the theme of a forthcoming workshop to be sponsored by the Northwestern Ontario Professional Recreation Society and the Northern Region of the Addiction Research Foundation.

The workshop (aimed at volunteer and professional recreation workers, plus municipal politicians) is being held Nov. 30 from 9 a.m. to 4 p.m. at the Airlane Motor Hotel in Thunder Bay.

It will feature such topics as "Alcobol and the Challenge it Presents to the Recreation Field", "The Liquor Licence Act and Municipal Responsibility", "Legal Liability", "The Benefits of Managing Alcohol Responsibly", and "Policy Development Models for Municipal Councils and their Recreation Department."

In attendance at the planning meeting held Oct. 29 in Thunder Bay were Norm Norris, president of NWOPRS (and Director of Recreation, Kenora Recreation Centre); Larry Curley, consultant, Community Programs, Dryden office of Ministry of Tourism and Recreation along with ARF staff from Sudbury and Thunder Bay. Ron Douglas, program consultant from the Northern Regional office of the Addiction Research Foundation chaired the all-day meeting.



LARRY CURLEY, Consultant, Community Programs, Ministry of Tourism and Recreation (Dryden office) and Ken Moffatt, Community Consultant, Addiction Research Foundation (Thunder Bay office) as they go over final details for the November 30 workshop on Leisure, Liquor and Liability to be held in Thunder Bay.

FIGURE 6

SCHOOL FOR ADDICTION STUDIES

Mr. Norm Norris
Recreation Director
Kenora, Ontario

Dear Mr. Norris:

This letter is to certify your attendance at the LEISURE, LIQUOR AND LIABILITY WORKSHOP held Friday, November 30, 1984 in Thunder Bay. The workshop was sponsored jointly by the Northwestern Ontario Professional Recreation Society and the Addiction Research Foundation's Regional Programs Division and School for Addiction Studies.

The workshop consisted of six hours of lectures, discussion and demonstrations on topics related to the management of alcohol in public recreation facilities. Specific issues presented were: Special Occasion Permits; Legal Liability; Drinking Practices and Alcohol Management; Community Receptivity to Managing Alcohol; and the Thunder Bay Model for Alcohol Policy Development.

Thank you for your attendance and participation. We hope that the information gained and resources introduced to you will serve you well in your recreational ventures.

N. Norris
Norm Norris
President,
Northwestern Ontario
Professional
Recreation Society

Glen Murray
Director,
Northern
Ontario
Programs

Donald E. Meeks, Ph.D.
Director,
School for Addiction
Studies

A Division of the Addiction Research Foundation

FIGURE 7

Alcoholism and Drug
Addiction Research Foundation

Northern Regional Office
Claridge Building
144 Pine Street, Suite 203
Sudbury, Ontario P3C 1X3
(705)675-1181

November 12, 1984

Mr.
Leisure Services Co-ordinator
P.O. Box
Ontario

Dear Mr.

As you know, a workshop on alcohol use in recreational facilities was held in Sudbury in June 1984. The response was tremendous!

Recently the Addiction Research Foundation (ARF) and the Northwestern Ontario Professional Recreation Society (NWOPRS) have finalized plans to co-sponsor a similar event in Northwestern Ontario. We are very pleased, therefore, to invite you to attend a one day workshop entitled,

LEISURE, LIQUOR AND LIABILITY: Managing Alcohol in Recreational Facilities

to be be held in Thunder Bay, November 30, 1984 at the Airlane Motor Hotel. Enclosed is a registration form and copy of the agenda.

If you have any questions about the workshop, please contact either:

Mr. Ken Moffatt (ARF) (807)622-0609	or	Mr. Larry Curley (NWOPRS) (807)223-2271

We look forward to discussing this most important community issue with you.

Sincerely,

Ronald R. Douglas
Workshop Chairman and
Regional Program Consultant

c.c. N. Norris, President
Northwestern Ontario Professional
Recreation Society

adopters are described as opinion leaders who are young, creative, maintain social contacts, and rely on journals, face-to-face contact and media as a source of information.

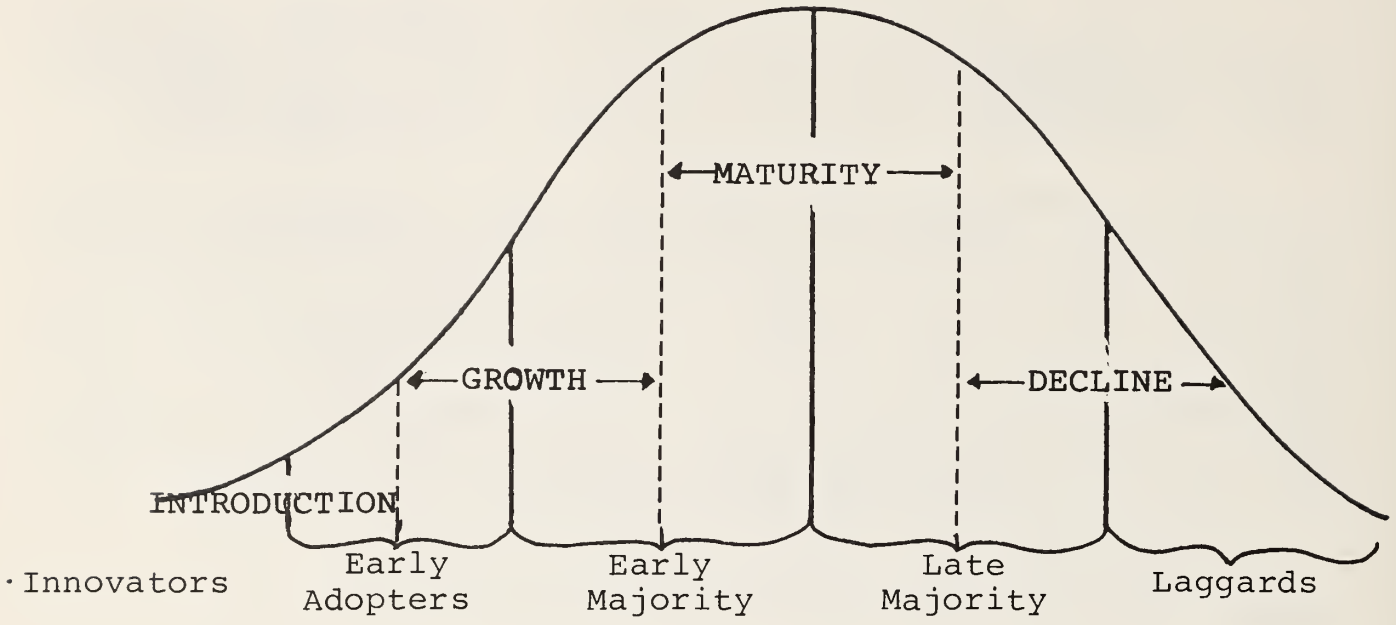
The "early adopters" in the adoption process, are preceded by "innovators", and followed in their buying or exchange habits by the later groups known as the "early majority" and the "late majority". The last group to adopt products according to this model are the "laggards".

It is interesting to note that those "early adopters" who returned to their local communities to initiate a policy development process actually became "innovators" at the local level because of the newness of this type of work. They tended to seek a working relationship with Foundation staff in order to benefit from the prior experience that we had and in order to gain access to scientific information on policy development. These working relationships continued as the early adopters began to develop their own policies in their own communities, strategies were developed in order to bring the majority of their community on board in support of the policy development process.

PRODUCT LIFE CYCLE

The fourth concept taken from the marketing literature is the notion of **life cycle** of the product. We are pioneering a new idea and the life cycle concept would indicate that we are at the "introduction" phase. According to McCarthy and Shapiro, "potential target customers must be told about the existence, advantage, and uses of this new product" and that is what we have been doing. We are however, showing signs of being in the early parts of the "growth" phase. While the Thunder Bay developments were our first model, replication in other communities has diversified the product options. Other communities have adapted the model policy to meet their own community needs and as such have expanded the definition and possible uses of the policy instrument. Another clear sign that we have entered the early stages of the growth phase is that increasingly politicians and recreationists in the North and elsewhere have begun to refer to the policy product as a product worth considering in the solution of their own community problems. It appears that we are gaining some brand familiarity in the market place and it looks as if there will be a significant growth period which we must go through prior to our product reaching a "market maturity" stage where demand declines as illustrated in Figure 8.

FIGURE 8



Thunder Bay Policy
Corporate Goal Update
Northeastern Workshop
Northwestern Workshop
Smaller Seminars
Other Communities
Explore Idea or Initiate
Development of Policy

TIME SINCE INITIATING POLICY IDEA

Adapted from: Mellott, 1983 p.558 & McCarthy & Shapiro, 1979 p.644.

CONCLUSION

We have spent a good number of years in research and development of this important policy area. Our policy product has developed, in theoretical terms, as far as it can without having been tried and tested in the market place of consumer usage. Consumer usage will, without doubt, lead to further refinements and it is hoped, more universal applicability to meet diverse communities' needs in North America.

The adaptation of some of the basic principles of social marketing has helped us to get our "product" out more quickly into the community, and it has given us the theoretical framework for further policy development. Both the research and development arm and the marketing arm of our organization must work in a more symbiotic relationship with the consumer groups in our communities in order for product (policy) growth to continue, and social marketing offers itself as one approach to local alcohol policy development.

> The future is not a result of choices among alternative paths offered by the present, but a place that is created - created first in mind and will, created next in activity. The future is not some place we are going to, but one we are creating. The paths to it are not found but made, and the activity of making them changes both the maker and the destination.-- John Schaar (Conroy, 1978)

Thunder Bay, as Ron will illustrate, is one community creating its future.

ACKNOWLEDGEMENTS

The author wishes to acknowledge the contribution of Ron Douglas in the preparation of this article. The author also acknowledges the contribution of ARF Northern Health Promotion staff whose fine work in developing promotional strategies for local policy formulation is reflected in this paper. These pioneer social marketers include Regina Caverson, Ron Douglas, Lorrie Grannary, Ken Moffatt, and Joan Ruhnke. Appreciation is also extended to Marg Thomson, City of Thunder Bay Policy Developer, and Pat Ashwin from the School of Addiction Studies and Northwestern Ontario Professional Recreation Society representatives, Larry Curley and Norm Norris.

REFERENCES

Addiction Research Foundation
1985 The Mandate, Functions and Goals of the Addiction Research Foundation. Internal document (rev. 1985). Goal Statement No. 1. Toronto: Addiction Research Foundation.

Conroy, B.
1978 "Megatrend Marketing: Creating the Library's Future". In: G.T. Ford (ed.) Marketing and the Library. New York: The Haworth Press

Kotler, P. and G. Zoltman
1971 "Social Marketing: An Approach to Planned Social Change". Journal of Marketing 35, p. 152-182

McCarthy, E.J. and S.J. Shapiro
1979 Basic Marketing. Second Canadian Edition. Georgetown, Ontario: Irwin-Dorsey Ltd.

Mellott, D.W.
1983 Fundamentals of Consumer Behaviour. Tulsa, OK: Pennwell Publishing Co.

Murray, G.G. and R.R. Douglas
1985 "Social Marketing for the Alcohol Policy Arena: Some Considerations for Practitioners", Internal Document No. 50. Toronto: Addiction Research Foundation

Murray, G.G., M. Thomson, and R.R. Douglas
1984 "Municipal Government Intervention in Alcohol Policy: A Working Model". Recreation Research Review 1, p. 28-34. A paper originally presented to the Leisure Research Program, International Sociological Association's 10th World Congress of Sociology, Mexico City, Mexico, August 1982

Ruhnke, J. and R.R. Douglas, eds.
1983 "Northern Ontario Media Directory", Internal Document No. 17. Toronto: Addiction Research Foundation

ALCOHOL MANAGEMENT POLICIES FOR MUNICIPAL RECREATION DEPARTMENTS: DEVELOPMENT AND IMPLEMENTATION OF THE THUNDER BAY MODEL

Ronald R. Douglas
Regional Consultant
Addiction Research Foundation
Sudbury, Ontario

INTRODUCTION

Glen Murray has illustrated social marketing as an applied theory in the Foundation's programming efforts in Northern Ontario to generate community initiatives in the development of alcohol control policies. Louis Gliksman will follow my presentation with the results of the evaluation on the Thunder Bay intervention. It is the development and implementation of this community's policy, which has become the model for marketing policy to other northern communities, that I will be addressing.

From a marketing perspective, the theory provides for an alternative solution to the problem, the demonstrated model permits for trial and error, and the evaluation legitimizes the intervention.

APPLYING KNOWLEDGE

Since this symposium is focussing on applied research, I will note a few instances of our reference to the literature in developing this particular intervention, prior to providing a brief overview of the process used in Thunder Bay. McCarthy and Shapiro's work (1979) was one key marketing reference.

Over the period of developing, implementing, and evaluating the Thunder Bay policy, the project staff had a number of programming realities to deal with. Without a doubt, if we had access to the information being presented here today, our task would have been considerably easier. Nonetheless we did address a number of programming problems with the aid of the literature and expert advice.

First we realized that we had to shift our perception from viewing alcohol solely in a health related context to one that considered a leisure perspective. It took us a while to realize that while there are health-related problems associated with alcohol consumption, consumers were drinking in a leisure environment with associated benefits of socializing, relaxation, and entertainment as well. Dik Browne's Hagar comic strip aptly illustrates the dilemma (Figure 1).

FIGURE 1

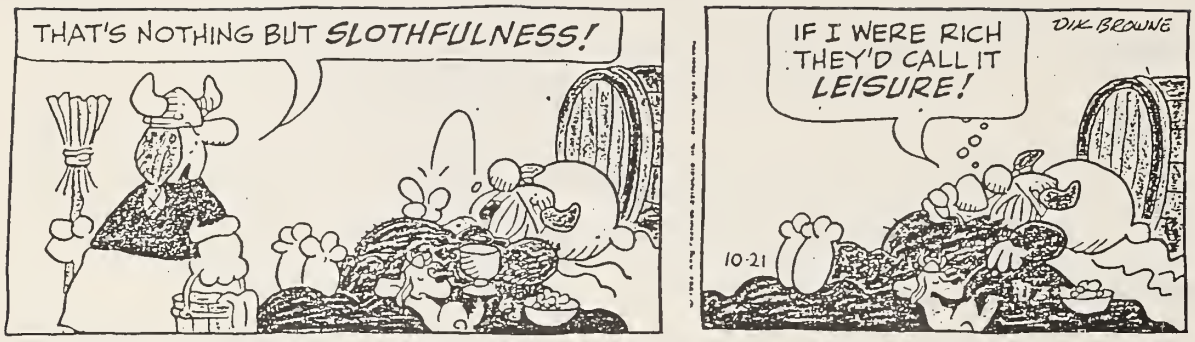


FIGURE 2

WELL, FRANKLY, I THINK OUR CHANCES OF REPEATIN' AS LEAGUE CHAMPS AREN'T TOO HOT 'CAUSE OUR BEST PLAYER WENT ON THE WAGON.

While we cast ourselves in the role of Helga by nagging the public with health consequence messages, the consumer was experiencing an enjoyable drink with companions in a free-time activity.

It soon became apparent that we had to revise our strategy and link health issues to consumers' needs. This meant communicating a message that would enhance the recreational activity involving alcohol by reducing the risk of experiencing related consequences, specifically, avoiding the possibility of being involved in a liability suit. This is a real threat since most participants come to functions in their automobiles and could leave impaired. Pointing out a threat and offering a solution to reduce the risk changed the consumers' perception of us from naggers to helpers. As Jim Anderson mentioned in his presentation here the other day, a favourable public perception can have a positive impact on a program initiative. In this instance, if communities responded by developing measures to avoid civil suits, they would indirectly address associated health issues as well.

In marketing terms, this meant **packaging** the **information** so that it would not only not be rejected, but recognized as helpful and preferred as a solution to the problem. This repackaging has been extended to the manner in which we now introduce the topic and ourselves at recreational workshops. Thanks to suggestions from Dr. Michael Chubb of Michigan State University, we now begin our presentations with a collection of similar cartoons as an ice breaker (Figure 2).

Repackaging also involved a realization that we could not communicate with target audiences in our working **jargon**. As Worden (1979) points out, terms can give your intervention a popular or unpopular connotation. It soon became evident that the word "control" created a negative impression and would have to be substituted with the word "use" or "management". Generally, people responded more favourably to "alcohol use policy" or "alcohol management policy". By making this substitution, we were able to dispel fears that we were prohibitionists.

Repackaging enabled us to position ourselves in the marketplace. As a result of identifying who was the consumer, we were better able to communicate with them.

Another realization was discovering the inability of citizens to readily comprehend **principles** presented in scientific language. For instance, it was very difficult to explain the Single Distribution Curve. We had to use basic teaching practices. First we stated the concepts upon which the principles were based, in simple, easy to understand terms, such as defining a "standard drink" and demonstrating a community's "range of consumption". A slide show based on Jan deLint's work (1976) was a

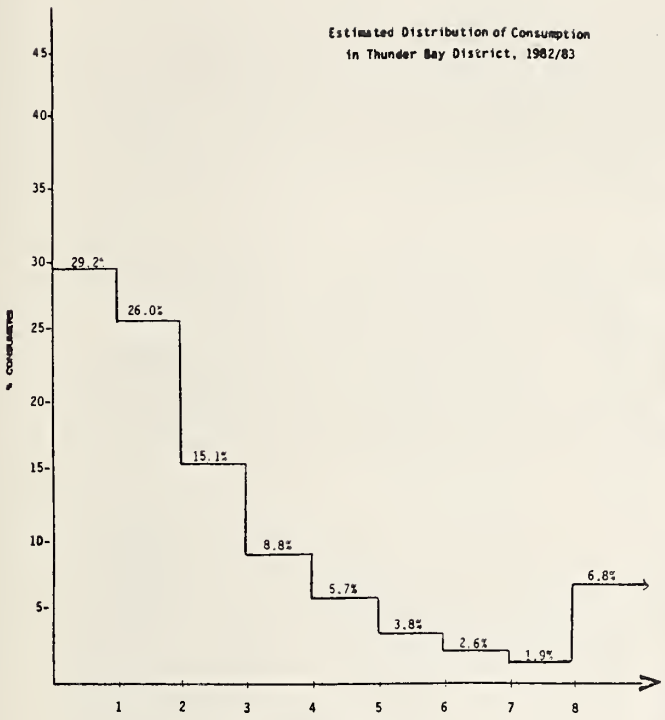
helpful beginning step as was Robbie Simpson's programmer's guide for the use of consumption statistics (Simpson and Rush, rev., 1985). By demonstrating that a range of non-drinkers to moderate and heavy consumers use recreational facilities, we showed the importance of managing alcohol by moderating consumption in order to reduce risks. Even with this, we became acutely aware that we could not rely on facts and truth alone. We also needed to make the message entertaining. Therefore, we associated the distribution curb with what is amusingly referred to in Canada as the "Molson Muscle". Note the similarities between the graph and the picture (Figure 3).

Another means we used to communicate an understanding was to use others' jargon in our message. For example, when communicating the range of consumption and risks involved, as depicted in Figure 3, we illustrated the consumption distribution by the behaviour of a party goer. For example, when he (or she) arrives at your party sober, he is "ill-at-ease." After a glass is placed in the party goer's hand, he begins to relax by sipping the drink, clunking the ice around in the glass and/or sketching images in the condensation on the side of the glass or bottle. Combine this with a couple of drinks and the party goer is "at-ease;" in our terms, at a "low risk" of experiencing an alcohol related problem. With reduced inhibition, the party goer is more likely to talk, dance, sing and have a good time. However, there are those, we point out, who continue to consume until they finish a case; thus consuming 8 to 10 beers. In this instance, they are becoming "dis-eased". In our jargon, these individuals are at a "very high risk" of experiencing a problem associated with excessive alcohol consumption. So the consumption range is personalized to a range of experience that most drinkers can relate to - "ill-at-ease", "at-ease", and "dis-eased".

Of course such an illustration was picked up from one our long standing allies in the fight against alcoholism, Alcoholics Anonymous. Any of you who have had the good fortune to attend an A.A. meeting or round-up will attest to the fact that some members of A.A. are among the most skilled presenters on the topic. While this is not our usual reference to the literature, it could be viewed as acquiring valuable communication skills from those who have attended the "school of hard knocks."

I should note that we are very fortunate to have had a considerable amount of **local data** on alcohol consumption and related problems, thanks to Norman Giesbrecht and Joe Brown (1977). This not only provided data for the study group proposing the policy but information for the media.

FIGURE 3



LOW RISK	MILD RISK	MODERATE RISK	HIGH RISK	VERY HIGH RISK
52,231 ± 8.6%	22,702 ± 0.4%	8,994 ± 1.5%	4,270 ± 2.4%	6,476 ± 2.2%

(Simpson & Rush, 1985)

(ARF Slide, Alcohol Problems and Their Prevention)

About this same time period, the Federal Government of Canada launched its national "Dialogue on Drinking" campaign. Its theme was "Drinking: If We Don't Talk About the Problem, We'll Never Start to Solve It" hoping to create "awareness, concern, action" in communities. By piggy-backing on this multi-million dollar program, a local committee established a forum for people to explore the issue in Thunder Bay (Douglas and Scully, 1977). As a result, the community was exposed to information that alcohol was more readily available and they were experiencing higher rates of alcohol consumption and related problems than the provincial average for Ontario.

I agree with Gerry Conroy's earlier comments that having access to community data is vital to mobilizing a community into action. Therefore, I encourage researchers to make data available to programmers; for people will incorporate information, as Walter Lifton (1966, p. 171) states, when "the information is presented in a way which enables them to use the facts with minimum of transfer". As Lifton implies, the less pain involved in getting my hands on information the more likely that I will use it.

Bob Reynolds referred earlier to the importance of critical **events**, such as a traffic accident, in initiating community action. Two events occurred during this period that heightened community awareness in Thunder Bay. First, the city proposed to increase outlets by placing bars in some recreational facilities. This resulted in the formation of opposition groups (Giesbrecht, 1984). Secondly, an incident occurred at a drinking event in a city owned recreation facility at which a child was injured by a drunken participant. The father threatened the city with a civil action. The heightened community awareness of the alcohol problem in the community combined with the pressure on the city to avoid a civil suit, provided the opportunity to suggest to all parties involved that the development of a policy was the best alternative to the situation.

Also previously mentioned here by Bob Reynolds and Friedner Wittman is the importance of **constituency-building** to community prevention programming. Even using marketing techniques, we were experiencing difficulty in getting recreationists to ally themselves with the intervention; for they would initially argue that the development of an alcohol policy countered elements of their notion of recreational philosophy representing "freedom of choice". However by reviewing the recreation literature, we were able to counter their argument with information from 'gurus' in the recreational and social science fields. For instance, Thelma McCormack (in Godbey and Parker, 1976, p. 6) noted that "recreation is a system of control, and like all systems of social control, it is to some degree manipulative, coercive and indoctrinating". Therefore, programs designed to prevent vandalism, "keep kids off the

street", or services provided in unstable urban areas to "cool things off" were presented as examples of recreationalists' involvement in social control.

Godbey and Parker (1976, p. 128) suggested that "the traditional justification for government involvement in leisure services has been that such involvement was necessary to provide for the general welfare of the population" - not unlike the rationale used in developing public health oriented alcohol control policies. Godbey and Parker (1976, p. 147) advise that "the best way to minimize the government's use of leisure as a means of social control is by seeking a high degree of citizen involvement in the decision-making process of government agencies involved."

Once the recreation departments accepted the position that they in fact had a legitimate role in managing alcohol, they were faced with the challenge of democratizing the policy formation process. In order to accomplish this, citizen involvement was required. This in turn expanded the process of constituency-building by forming a community committee to propose a policy. The point I'm attempting to illustrate here is that we used recreational concepts to remove a blockage. In referring to their literature, we learned that many recreation practitioners have not acquired a broad conceptual understanding of their profession that could assist them with conflict resolution (Murphy, 1974; Bacon, 1980). In fact, a 1981 Canadian survey of recreationalists (Minshall, 1983, p. 37) indicated that "recreationists find problems distressing and will, if possible, avoid dealing with them". Alcohol is certainly a problem to recreationalists. By reviewing the appropriate literature, we were better able to understand our targetted consumer and present them with persuasive information that stressed their professional obligation to prevent community alcohol problems, thus gaining an ally.

While the literature was helpful, we did find it **limited** in some instances. There appeared to be little information available that examined alcohol in a leisure context. Eric Single's presentation and prereading (1985) on serving practices is a welcome resource. It appears from our experience, that our information and advice are not appearing in the recreation literature. In short, we are an unknown resource. As a result, we had to spend a great deal of time introducing our own and our peers' work to the recreation community. It seems that there is a market out there that would very much like to have our information if only we would make it more accessible. Therefore, I would encourage you - researchers and programmers - to adopt a more multi-disciplined approach to prevention and to consider publishing in related fields, such as recreation and leisure research journals.

A review of the alcohol control literature also provided limited assistance. Basically, the literature reviewed state (macro) policies. It wasn't until we were underway that we came across Friedner Wittman's publications (see Appendix). They were quite a morale booster. But in 1978, we could not locate alcohol control literature that could advise us on how to go about developing an intervention at the community (micro) level. We were forced to access the political science literature for advice on policy development models. However, many of the models seemed academic and too rigid for us to utilize. It wasn't until we read Bauer and Gergen (1968) that we realized that policy development is at best a "muddling through" process that integrates intuition with elements from various models. At least we had found some information that could be applied at the "grass roots" level. I would recommend Bauer and Gergen (1968) as a must reading for anyone engaged in community alcohol policy development. Dye (1975) is also a good reference for the programmer just getting underway.

Coming to realize that there was no quick fix was difficult for city aldermen and administrators to accept. Initially city decision makers expected program staff to closet themselves away to draft a policy for their approval. It took a considerable amount of persuasion to convince the "powers to be" that this issue was too value laden to exclude public participation. A process that democratizes a control policy takes time. Taking the time to involve citizens in the policy development process not only produced a solution acceptable to community values but mobilized community support in the process.

As Glen Murray's reference to product adoption indicates, those involved in formulating the policy proposal become the community innovators, initially they rely on experts and the literature as primary sources of information, thus enhancing the influence of the expert consultant on alcohol issues. These policy proposers soon become influencial in communicating the recommendations to those affected by the policy.

Even with this process of incremental change occurring, the policy developers anticipated there would be laggards. Therefore, along with this democratic process, enforcement measures were designed as a strategy to prevent a few noncompliers from undermining the policy.

While we were engaged in the development of social controls, we relied on this **combination of enforcement and education strategies** to implement the policy. The educational component was important since we preferred that people voluntarily compiled with the policy regulations; the success of such a policy in a democratic state is dependent on this. For those deviant few, stronger sanctions could be utilized. It appears

to me that it was precisely this combination of education and enforcement that accounts for the success we have had to date. Therefore, the debate on which intervention is more effective - controls or education - appears to be outdated. Programmers would do well to spend their efforts in finding ways to effectively integrate the two rather than to champion one or the other. This is the short-fall, in my estimation, when applying pure social marketing to a policy intervention. The programmer may over focus on the voluntary adoption of the regulations and not realize the threat posed by "laggards". In doing so, the programmer plays into the hands of those with unrealistic expectations. As soon as there is a violation of the regulation, someone will say "I told you the policy wouldn't work" even though the great majority of people are abiding.

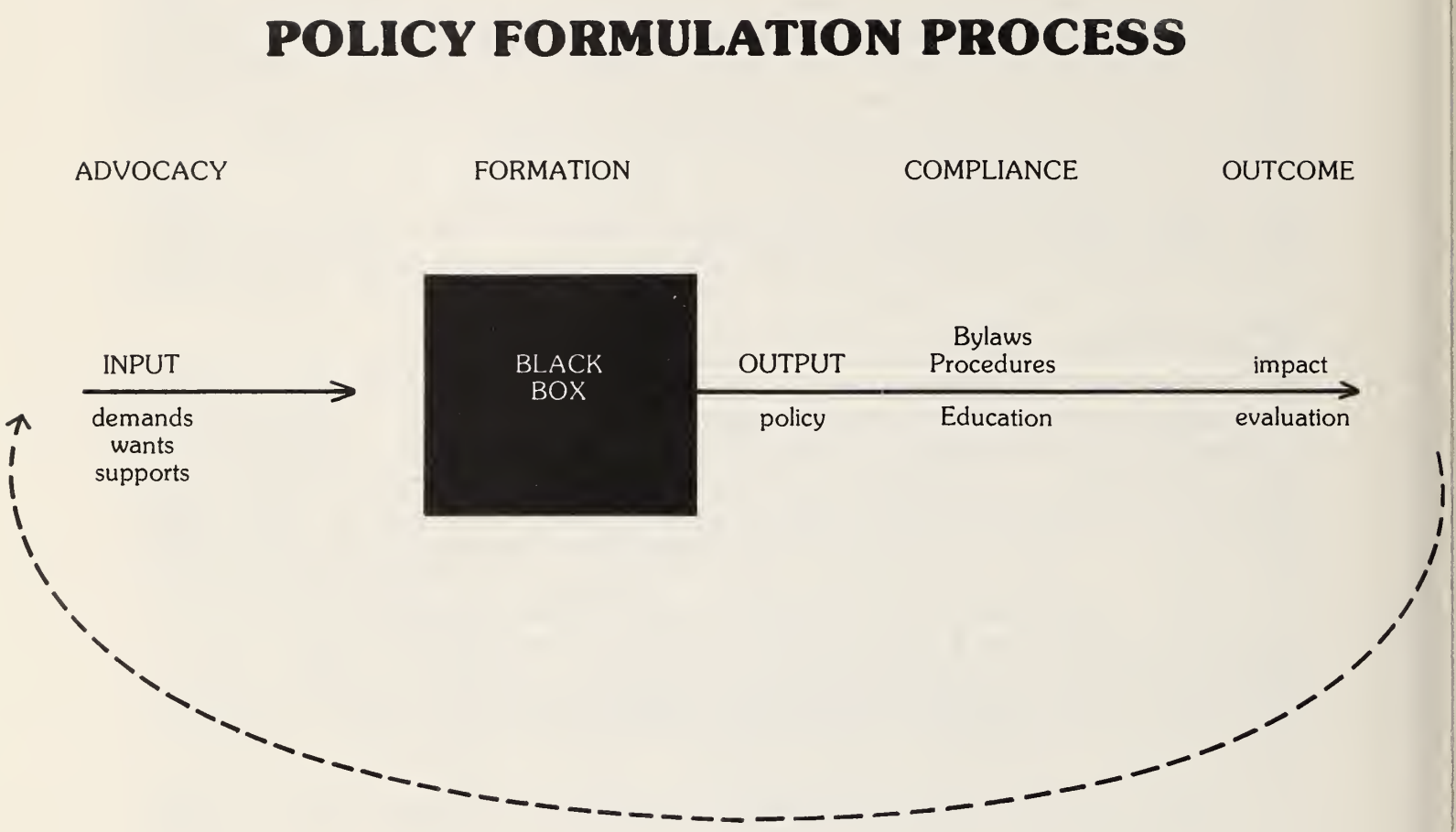
Dave Hart's presentation and prereading (1984) on "Campus Alcohol Policy and Education (CAPE)" is another example of the success of this dual intervention approach. Likewise Harold Holder has stressed the value of such concurrent strategies in his prereading materials (Holder and Blose, 1983).

Some have questioned why, as a community intervention, the project was **limited** to a segment of the community. By limiting the project to city owned facilities, we felt we could get a handle on the situation. Or as Warren (1972, p. 16) observed, "Much behaviour which takes place at the community level takes place within units, groups, companies, and other entities ..." - one of which are facilities and parks managed by a municipality. Most citizens use these recreational facilities at one time or another. Furthermore, this focussed programming removed the barrier of perceiving alcohol as a problem that is not solvable at the local level - something that was a broader societal problem. Having a Liquor Licence Act (1985) that delegates to municipal government the "local option" for determining use of alcohol in recreation facilities was helpful as well.

This limited focus appears now to be broadening. Other municipalities are beginning to replicate the intervention. Organizations in the private sector and service clubs are making inquiries. This modest beginning is starting to produce some incremental change or a "domino effect".

Because the intervention requires an extended time line and considerable planning, it had to be segmented into **manageable chunks.** As a result, the intervention was phased over a series of projects and managed by a project team. Following the demand for a policy (advocacy activity), project phases addressed the formulation of the policy (Douglas, 1978), its implementation (Moffatt, 1983), and its evaluation (Gliksman et al, 1983). (Figure 4)

FIGURE 4


POLICY FORMULATION PROCESS
ADVOCACY
FORMATION
COMPLIANCE
OUTCOME
INPUT
demands
wants
supports
BLACK
BOX
OUTPUT
policy
Bylaws
Procedures
Education
impact
evaluation

It is these first three phases that I will briefly describe. (See also publications by Thomson, Douglas, et al for a more complete description).

THUNDER BAY MODEL

Thunder Bay, the largest urban centre in Northern Ontario, has a population of approximately 120,000 people. It is blessed with ample parkland and recreational facilities. As previously noted, it has a 'drinking environment' that has higher rates of alcohol consumption and related problems than the provincial average. It is not surprising then, that alcohol problems were appearing in municipally owned and operated parks and facilities.

Advocacy normally occurs when individuals feel victimized (Wharf, 1979). In this case, a group concerned with the effect on the community lifestyle, spearheaded by a church social action committee but referring to themselves as a "group of concerned citizens", waged a vigorous campaign to prevent an expansion of bars into some facilities (Fleming, 1976). They wrote a persuasive document, appeared before council, packed the viewing gallery with supporters, lobbied aldermen prior to the meeting and received extensive press and electronic media coverage. At about the same time, a father, whose son was injured at a licenced special occasion function by an intoxicated participant, threatened the city with a civil suit. During all of this commotion, the Foundation had to walk a line of providing information to the advocacy group while offering assistance to the city. In both relationships, our advice was consistent - develop a policy to manage alcohol in city facilities. As a result, City Council directed the Parks and Recreation Department to develop a policy with assistance from the Addiction Research Foundation. With this initiative on the city's part, the advocacy group disbanded and the civil action was dropped.

Formation of the policy began with the development of a collaborative relationship between the City Parks and Recreation Department and the Thunder Bay Centre of the Addiction Research Foundation. The Foundation's Consultant advised the City Department's Planning and Policy Developer on planning strategy and alcohol related matters.

Once the working relationship between the Addiction Research Foundation and the City was established, a coalition was formed into a working group. The Task Team, as it was referred to, consisted of members from various groups who were viewed as not simply representing the interest of a particular group, but the welfare of the community as a

whole. Members were recruited from the District Health Council, Social Planning Council, Chamber of Commerce, Community Centres Council, City staff and the community at large. The City's Planning and Policy Developer was the chairperson (for a detailed discussion of a recreation practitioner's role in developing an alcohol policy, refer to Thomson et al, 1984). The Foundation provided information and "best advice" to the study group but could not vote on matters when the group was forming a consensus. Since this was a working group, members had to gather information from various groups and individuals such as the police, liquor licence inspectors, hotel association, user groups, etc. (Figure 5).

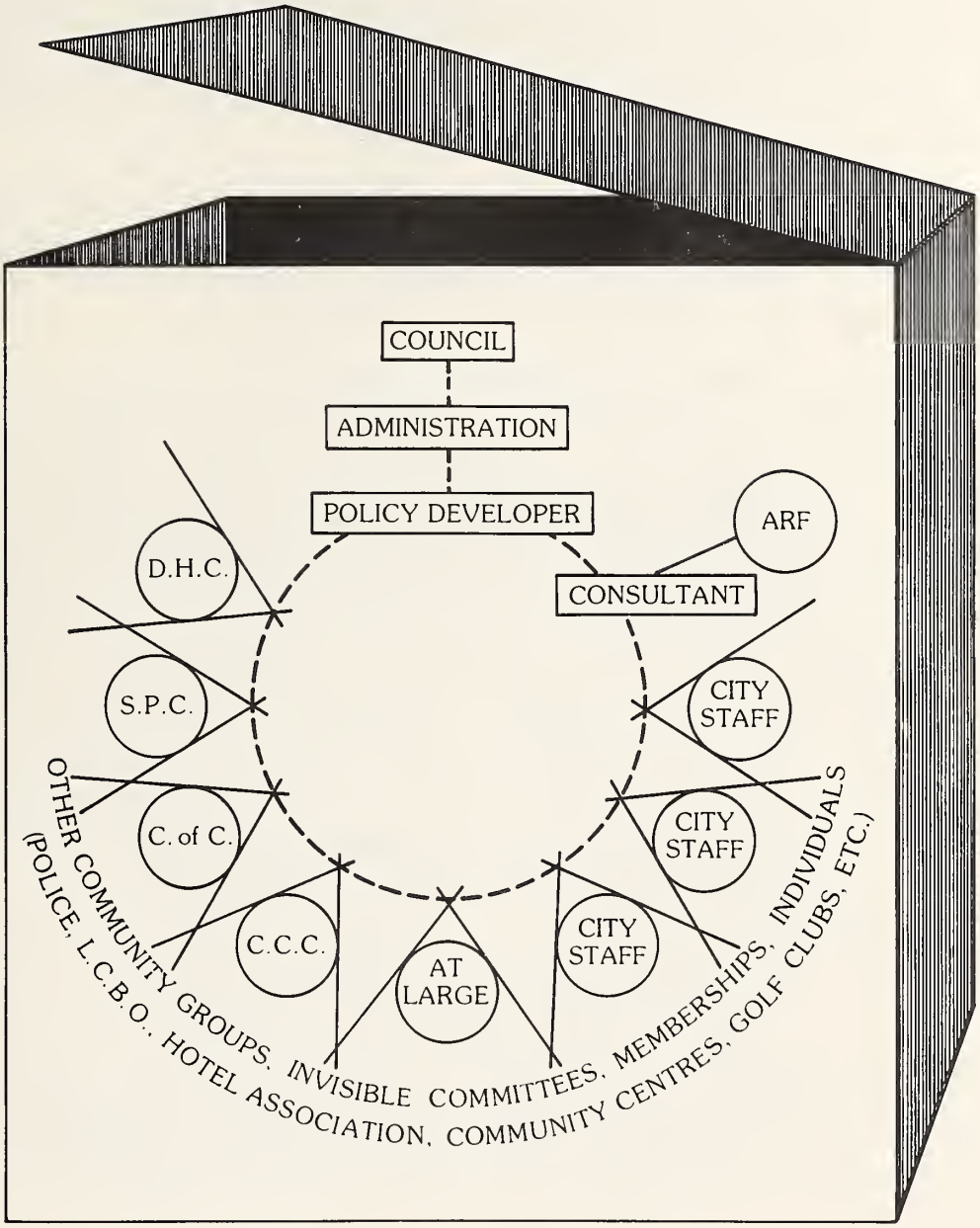
To guide the task team's work, the City developed the operating terms of reference. This was not only important in focusing the group's task but protected the City's Policy Developer from undue pressure from vested interest groups and criticism by the Corporation for not adequately representing the City's interests. The task team's terms of reference were as follows:

1. To gather and review any epidemiological data on the use of alcohol in Thunder Bay.
2. To collect and review comparative information relative to the tas from Parks and Recreation Departments across Canada.
3. To be familiar with the Liquor Licence Act.
4. To identify those facilities and programs which will be covered by the policy.
5. To examine areas of use of alcohol in the past five years both problems and examples of good management in Parks and Recreation owned facilities.
6. To gather the opinions of other agencies, organizations, groups and individuals connected with a facility as to how they perceive use or non-use of alcohol in Parks and Recreation owned facilities and programs.
7. To examine the goals and objectives of the Thunder Bay Parks and Recreation Department.
8. To obtain comments and suggestions from the staff of the Thunder Bay Parks and Recreation Department on the use of alcohol in City-owned facilities and programs.

These terms of reference helped ensure that the task team achieved its purpose of proposing to Council an alcohol management policy for the City of Thunder Bay's municipally owned and operated parks, facilities and programs that reflected the City's recreational philosophy and purpose, considered the needs of the community, and ensured the health and safety of participants where alcohol was deemed suitable for use.

FIGURE 5

INSIDE THE BLACK BOX



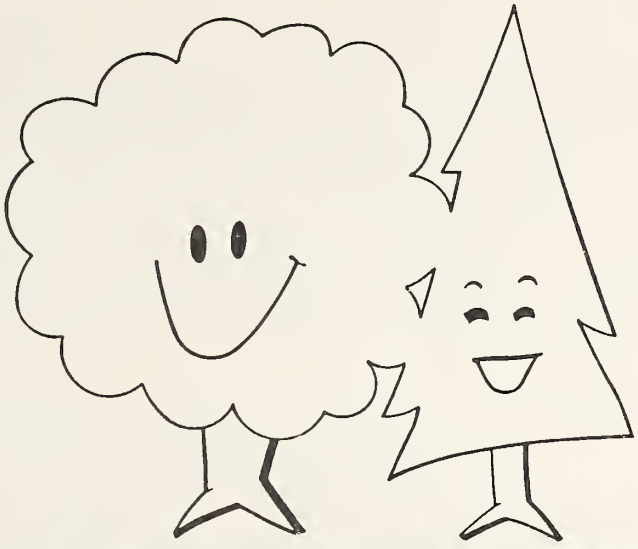
The **policy** is divided into five categories which allow for a range of alcohol consumption from no use, to special occasion use, to fully licenced use of alcohol. The regulations, approved by Council, state that there is to be no use of alcohol in open spaces (parks); alcohol use is permitted in municipally owned community centres, arena floor spaces, park lodges, and golf clubhouses under special occasion permits; alcohol is also permitted in a fully licenced clubroom at the curling club; tourist camps, tents, trailers and motor homes are considered 'residences' under the Liquor Licence Act of Ontario and one may use alcohol within 20 feet of same. This latter policy item has been altered by the new City bylaw which prohibits even the possession of alcohol in the tourist/trailer park over the July 1st holiday period each year.

Gergen (1968, p. 186) states that "until public behaviour is actually affected, it is not proper to speak of public policy formulation". To affect public behaviour, a combination of voluntary and mandatory **compliance** strategies were implemented.

Mandatory regulations involve department sanction of drinking events and enforcement of bylaws. User groups wanting to serve alcohol had to submit a hall/rental use agreement contract form to the Parks and Recreation Department for approval. This form lists a number of regulations, including the requirement to provide adequate supervision. Once the Department approves the application, the applicant takes the form to the Liquor Licence Board of Ontario to apply for a special occasion permit. I should mention that the Liquor Licence Board of Ontario has since developed their own "Guidelines for Hall Owners, Managers and Employees Regarding the Issuance of Special Occasion Permits" and "Points Which May Be Included in a Rental Agreement". These are free of charge upon request. The other aspect of the mandatory compliance strategy is enforcement of the City bylaw prohibiting the posession of alcohol in the tourist camp and adjoining park over the Canada Day celebrations.

The voluntary compliance strategy relied on a promotional mix involving orientation seminars for user group executives, media reports, public service ads, distribution of brochures and buttons, and posting of signs. The promotional theme, "PARKS ARE FOR PEOPLE ... Please Play By The Rules", was accompanied by happy faced logos of smiling trees. The logo may be altered for facility suitability. For example, "PLAYING FIELDS ARE FOR PEOPLE" depicts an eye-catching, eye-pleasing caricature of a smiling tree and baseball (Figure 6). A more complete description of the intervention may be obtained by referring to Thomson et al (1985).

FIGURE 6



PARKS ARE FOR PEOPLE...

Parks are for people -- and the people of Thunder Bay are justifiably proud of their parks and play areas. We treasure our access to clear bays, quiet stands of mature trees, our acres of sports fields and our children's playgrounds. In our city we have created an ideal environment for healthy recreational fun, and we want to keep it that way.

In a park setting, thoughtless noisy behavior by a few people can ruin the enjoyment of everyone else. That's why we must have rules governing personal conduct.

Parks are for people -- and people expect you to play by the rules.

Please Play by the Rules:

- Consumption of alcohol is prohibited in all open spaces including golf club fairways and playing fields.
- The service or sale of alcohol is permitted only with an L.L.B.O. Permit in community centres, arenas, golf course clubhouses, and lodges.
- In tourist camps, it is permitted to consume alcohol within 20 feet of a camp residence. (Exception: see special policy note below.)

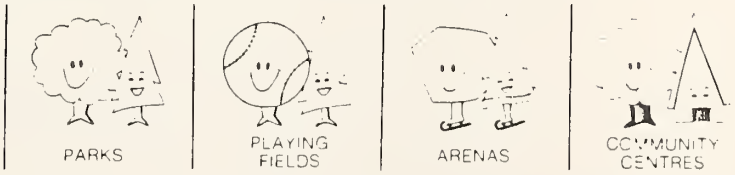
*** NOTE:**

SPECIAL POLICY FOR JULY 1ST WEEKEND

The possession of alcohol is prohibited **anywhere** in Chippewa Park (including the Tourist Camp) from 8:00 a.m. June 30th to 8:00 a.m. July 4th, 1983.

PARKS & RECREATION

CITY OF THUNDER BAY / 623-2711



Jon Newton (1984) summarized the policy formulation process in the Foundation's The Journal. It's worth restating here (Figure 7).

CONCLUSION

If you are still of two minds on this intervention - one of appreciating what has developed in Thunder Bay and one that doubts if people in your community would support the development of local controls - I would encourage you to follow Whitehead's (1979, p. 88) suggestion and "get a sounding of public opinion first, because our studies have shown that there is far more support for such measures than any of us had previously estimated". Louis Gliksman's presentation on the preliminary evaluation results on the Thunder Bay Alcohol Management Policy further illustrates this observation.

ACKNOWLEDGEMENTS

Project staff included Regina Caverson, Ron Douglas, Louis Gliksman, Ken Moffatt, Don Murray, Glen Murray and Cindy Smythe from the Addiction Research Foundation and Marg Thomson from the City of Thunder Bay, Parks and Recreation Department.

FIGURE 7

Basic steps to tailoring policy

- Develop a collaborative relationship with community resources, such as the ARF. Use them for advice on planning strategy, background information, and expertise on alcohol related matters.
- Form a working group or task team. Include politicians, the public, and planners on an equal-responsibility basis. Be sure members analyze and consider their individual drinking habits when making policy recommendations.
- Define and draft terms of reference. This breaks down into eight basic steps:
  1) gather and review epidemiological data on alcohol use/abuse in your community;
  2) collect and review comparative information from other municipalities;
  3) identify facilities and programs to be covered by the policy;
  4) pin-point areas over a five-year period in which both good and bad management of alcohol has affected municipal facilities and programs;
  5) be thoroughly familiar with the Liquor Licence Act as it applies in your community;
  6) poll other agencies, organizations, groups, associations, individuals connected with specific facilities to determine how they see the use, or non-use, of alcohol in municipal facilities;
  7) determine community-specific goals and objectives; and
  8) seek active input from recreation department staff on the use of alcohol in community-owned facilities.
- Use the task team to identify appropriate policy options. This includes making sure team members know the purpose, goals, and objectives of the local parks and recreation department; gathering and reviewing information on alcohol prevention measures; studying the literature on alcohol use in recreational settings; familiarizing members with provincial legislation dealing with alcohol use; comparing policies developed in other communities; carrying out a cost/benefit analysis of alcohol-use options; gathering information and views from all concerned individuals and organizations.
- Develop a team position on policy recommendations and a strategy for presenting the final policy to municipal councils. For example, the Thunder Bay task force decided to use one of its own members to present the policy to council, instead of making it the responsibility of the policy planner. They believe this achieved a more effective hearing.
- Transform the written policy into action. Divide this into *mandatory compliance* —action enforceable through bylaws and/or regulatory procedures associated with a policy decision — and *voluntary compliance*, or action created through voluntary behavior. This is achieved, for example, through effective public education and mass information programs, making full use of the local media. This also involves developing messages for publicizing policies. The more effective this process, the greater the public compliance.
- Carry out an on-going evaluation of your policy. Develop a questionnaire to investigate: attitudes toward the use of alcohol, legal control, and alcohol control generally; individual responsibilities in management programs; attitudes toward the use of alcohol in recreational facilities; future intentions, ie, future rental of facilities, attendance in facilities without alcohol permits, and compliance with the law; past behavior; attitudes toward your own alcohol policy; knowledge of policies in other communities; alcohol consumption within your community; and relevant demographic information.

REFERENCES

Bacon, A.W.
1980 Social Planning, Research and the Provision of Leisure Services. UK: University of Salford Centre for Leisure Studies

Bauer and Gergen
1968 The Study of Policy Formation. New York: Free Press

1984 "Campus Alcohol Policy and Education (CAPE Project)", Health Education 23(1), p. 23

Douglas, R.
1978 " Alcohol Policy - City Parks and Recreation Department. Regional Programs Proposal" (Internal document). Toronto: Addiction Research Foundation,

de Lint, J.
1975 "Current Trends in the Prevalence of Excessive Alcohol Use and Alcohol-Related Health Damage", British Journal of Addictions 70, p. 3-13

Douglas, R. and B. Scully
1977 "Dialogue on Drinking: The Thunder Bay Coalition". Contact 7(3). Internal publication. Toronto: Addiction Research Foundation

Dye, T.R.
1975 Understanding Public Policy. Englewood Cliff, NJ: Prentice-Hall, Inc.

Fleming, P. On behalf of a group of concerned citizens in Thunder Bay
1976 a presentation in Support of the Motion to Rescind the Decision to Establish a Licenced Liquor Outlet in the Municipally Operated Chapples Clubhouse, Thunder Bay, Ontario

Giesbrecht, N. and J. Brown
1977 Alcohol Problems in Northwestern Ontario - Preliminary Report: Consumption Patterns and Public Order and Public Health Problems. Substudy No. 872. Toronto: Addiction Research Foundation

Giesbrecht, N.
1984 "An Overview of Research and Policy with Regard to the Control Perspective on Alcohol Problems: A Canadian Viewpoint". In: Holder, H., and J. Hallam (eds.), Control Issues in Alcohol Abuse Prevention: Local, State and National Designs for the 80's. Columbia, SC: South Carolina Commission on Alcohol and Drug Abuse

Gliksman, L., M. Thomson, K. Moffatt, C. Smythe, and R. Douglas
1983 "An Evaluation of Policy to Manage Alcohol in Recreation Facilities." Internal document. Toronto: Addiction Research Foundation Research Proposal

Government of Ontario
1985 The Liquor Licence Act. (Section 46(a) 1.) Toronto: Queen's Printers for Ontario

Godbey, G. and S. Parker
1976 Leisure Studies and Services: An Overview. Philadelphia: W.B. Saunders

Holder, H.D. and J.O. Blose
1983 Reduction of Community Alcohol Problems: A Community Simulation for Wake County, North Carolina, Washington County, Vermont, and Alameda County, California. Executive Summary. Chapel Hill, NC: The Human Ecology Institute

Lifton, W.
1966 Working with Groups. New York: John Wiley and Sons Inc.

McCarthy E.J. and S.J. Shapiro
1979 Basic Marketing: Second Canadian Edition. Georgetown, Ontario: Irwin-Dorsey Ltd.

Minshall, L.
1983 "Recreation Problems and Practices: An Analysis." Recreation Research Review 10(1), p. 35-38

Moffatt, K.
1983 "City of Thunder Bay Alcohol Management Policy: Compliance Phase" Project Proposal. Internal document. Toronto: Addiction Research Foundation

Murphy, J.F.
1974 Concepts of Leisure: Philosophical Implications. Englewood Cliffs, NJ: Prentice Hall, Inc.

Newton, J.
1984 "Ontario Community Tackles Public Drinking." The Journal 13(7), p. 16

Reynolds, R.I.
1984 "Altering the Drinking Environment at the County Level." In: M. Moore and D.R. Gerstein (eds.), Toward the Prevention of Alcohol Problems. Washington: National Academy Press

Reynolds, R.I. and J.D. Wynne
forth-coming "Alcohol Problems: Public Officials and Public Policies - Opportunities for Influence". In: H. Holder (ed). Control Issues in Alcohol Abuse Prevention: Strategies for States and Communities. Greenwich, CT: JAI Press Inc.

Simpson, R. and B. Rush
1981 A Programmer's Guide to Alcohol Consumption Statistics. Internal document No. 57. Toronto: Addiction Research Foundation.

Thomson, M. and R. Douglas
1983 "'A Peek into the Black Box': A Policy Development Model for the Resolution of Social and Health Issues in Municipal Recreation." Recreation Research Review 10(1), p. 29-34

Thomson, M., R.R. Douglas, G. Murray and K. Moffatt
1984 "A Recreation Practitioner's Role in the Development of a Municipal Alcohol Policy", Municipal World 94(9), p. 227-229, p. 250

Thomson, M., K. Moffatt, R.R. Douglas, G.G. Murray and L. Gliksman
1985 "Implementing a Policy to Manage Alcohol in Municipal Recreation Facilities: Influencing Participants to Play by the Rules", Recreation Canada 43(3), p. 42-46

Warren, R.L.
1972 The Community in America. New York: Rand McNally

Wharf, B.
1979 Community Work in Canada. Toronto: McClelland and Stewart

Whitehead, P.
1979 "Public Policy and Alcohol Related Damage: Media Campaigns on Social Controls", Addictive Behaviours, 4, p. 83-89

Wittman, F.
1982 "Zoning Ordinances, Alcohol Outlets and Planning: Prospects for Local Control of Alcohol Problems", NIAAA Grant, Medical Research Institute, Berkeley, CA

Worden, M.
1979 "Population and Unpopular Prevention", Journal of Drug Issues. 9(3)

ALCOHOL MANAGEMENT POLICIES FOR MUNICIPAL RECREATION DEPARTMENTS: AN EVALUATION OF THE THUNDER BAY MODEL

Louis Gliksman
Researcher
Addiction Research Foundation
London, Ontario

Over the years I have been fortunate to be involved in a number of very innovative programs. The project that has just been described by Glen Murray and Ron Douglas is obviously one such program. Being asked to set up an evaluation for such creative and important projects can be extremely challenging, and the Thunder Bay project proved to be no exception.

We were faced with two very different sets of questions that required answering. The first set was of a scientific nature: was the intervention having its desired impact? The second set was of a political nature: were residents of Thunder Bay going to react negatively to the more restrictive alcohol policies that were being implemented?

In order to answer both sets of questions, we decided to conduct two surveys of the residents of the City of Thunder Bay. The preliminary survey was designed to establish baseline information about the attitudes and behaviours of the citizens of Thunder Bay, and also indicate their receptivity to conservative alcohol policies. The second survey was designed to determine whether the intervention had had any impact. In order to be able to draw inferences about impact and outcome, we co-opted a second community in Northern Ontario, Walden, to act as a comparison site, and to be surveyed on each occasion that Thunder Bay was surveyed. Walden is situated just outside of Sudbury, and although not as large as Thunder Bay, it has numerous characteristics that made it appropriate to serve as a comparison town.

In both Walden and Thunder Bay, a drop-off technique was used to distribute the questionnaire. We initially set out to contact about 1,000 households in each community, but because of refusals, no one home, etc., our final pretest samples were approximately 400 and 300, for Thunder Bay and Walden respectively. Although designed to be a carefully controlled four-stage probability design (after Levy and Lemeshow, 1980), the initial plan was not followed completely because of problems in logistics, manpower and money. However, the final samples seem to be representative of all socio-demographic strata. (Descriptions of the characteristics of both samples are available upon request).

My presentation today will focus primarily on the preliminary surveys of both Walden and Thunder Bay, will describe the initial attitudes and behaviours of their residents, and will attempt to address the second question, that of residents' receptivity to public policies. All variables that I will be discussing are based on scales that have been constructed for this study, pretested, and found to be valid and reliable.

The results will be presented in terms of frequency distributions of the categories of responses for a number of selected measures only. Other variables assessed, but not presented here, followed the same general patterns and are available upon request.

ATTITUDE TOWARD YOUTHFUL DRINKING

Table 1 represents the distributions for Thunder Bay and Walden, respectively. Scores can range from 5-25, and are keyed so that a high score indicates a negative attitude towards young people's drinking (i.e. that it is a bad thing). As we can see from this table, most respondents, 67.4% for Thunder Bay and 72.6% for Walden, have negative attitudes towards young people drinking. This is important because many recreational facilities are oriented towards activities by young people who are influenced by consumption in such facilities.

ATTITUDE TOWARD ALCOHOL USE IN RECREATIONAL FACILITIES

Based on a 12-item scale, high scores on this measure indicate a negative attitude toward the use of alcohol in recreational facilities. This variable measures one of the big aspects of the policy itself and provides an indication of public sentiment to this issue. As can be seen from this table, over 50% of the Walden sample and 43% of the Thunder Bay sample had relatively negative attitudes towards the use of alcohol in recreational facilities. Many more respondents had ambivalent or neutral attitudes toward this issue. Very few individuals felt good about the consumption of alcohol in recreational facilities (Table 2).

ATTITUDE TOWARDS LEGAL CONTROL OF ALCOHOL

This variable was designed to assess their individual reactions to further restrictions on the sale, distribution, and availability of alcohol. As we can see from Table 3 respondents are generally not resistent to the idea. In fact, 64.3% of the Walden sample and 54.1% of the Thunder Bay sample could be considered to be favourably disposed to this issue. This finding suggests that concerns about imposing further restrictions on alcohol use, at least in these facilities, may be unwarranted.

TABLE 1

ATTITUDES TOWARD YOUTHFUL DRINKING

(5 items, Range 5-12)

TO AGREE INDICATES A NEGATIVE ATTITUDE TOWARD ALCOHOL USE BY YOUNG PEOPLE

	RELATIVE FREQUENCIES	
	Walden	Thunder Bay
Disagree strongly (5-7)	0.5	0.0
Disagree (8-12)	4.7	5.8
Neutral (13-17)	22.2	26.2
Agree (18-22)	52.2	50.8
Agree strongly (23-25)	20.2	16.6
Mean	10.67	11.14
Standard deviation	3.65	3.71

TABLE 2

ATTITUDES TOWARD ALCOHOL USE IN RECREATIONAL FACILITIES

(12 ITEMS, RANGE 12-60)

TO AGREE INDICATES A NEGATIVE ATTITUDE TOWARD ALCOHOL USE IN RECREATIONAL FACILITIES

	RELATIVE FREQUENCIES	
	Walden	Thunder Bay
Disagree strongly (12-28)	0.0	0.0
Disagree (19-20)	9.3	9.3
Neutral (31-42)	35.6	47.2
Agree (43-54)	46.8	38.8
Agree strongly (55-60)	8.3	4.2
Mean	30.42	32.06
Standard deviation	7.15	7.95

TABLE 3

ATTITUDES TOWARD LEGAL CONTROL OF ALCOHOL

(8 ITEMS, RANGE 8-40)

TO AGREE INDICATES A POSITIVE VIEW TOWARD LEGAL CONTROLS OF ALCOHOL

	RELATIVE FREQUENCIES	
	Walden	Thunder Bay
Strongly disagree (8-12)	0.0	1.3
Disagree (13-20)	9.3	9.8
Neutral (21-28)	26.4	34.6
Agree (29-36)	54.6	44.3
Agree strongly (37-40)	9.7	9.8
Mean	19.9	20.41
Standard Deviation	6.03	6.28

BEHAVIOURAL INTENTION TO ATTEND NON-ALCOHOLIC FUNCTIONS

One of the prime concerns to politicians and organizers of events is that inaccessability to alcoholic beverages will greatly reduce attendance at functions. This measure was designed to tap respondents' intention to attend a function at a recreational facility if accessability to alcohol were severely limited or removed entirely. As we can see, things may not be as bleak as originally feared. Almost 80% of the Walden sample and 75.2% of the Thunder Bay sample indicated that this would have little bearing on their likelihood of attendance. It appears that people would not stay away in droves if alcohol were not available (Table 4).

BEHAVIOURAL INTENTION TO COMPLY WITH THE LAW

One last measure that I will describe deals with the issue of compliance. Many individuals fear that incorporation of these policies or laws will result in people finding ways to circumvent the rules and still drink. We asked respondents whether they intended to comply with whatever regulations were put into place. As we can see from Table 5, this initial fear is unwarranted. Only 5.1% and 4.7% indicate any intention at all to break the rules. The rest intend to comply or, at this point in time, have indicated no intention one way or the other.

Two things are obvious from the data that I have just presented. Firstly, the samples from each community have very similar distributions in terms of their attitudes and intentions (and also in terms of their consumption patterns and demographic characteristics that I did not discuss today). Thus, Walden appears to be a reasonable comparison site for Thunder Bay. Secondly, it appears that Ontario residents, or at least those from these two Northern Ontario communities, are much more receptive to the idea of conservative alcohol policies than had initially been thought. If receptivity exists, perhaps the time is right for such policies to be immediately implemented.

We have recently completed the posttest survey of both Walden and Thunder Bay and have conducted some preliminary analyses. I should note that approximately six months separated the pretest from the posttest. During this period, Thunder Bay, (where the policy existed) was subjected to a large scale media campaign. Walden had no such policy in place and thus no media campaign. What we were looking for in these comparisons were appropriate, significant changes in Thunder Bay, and no such corresponding changes in Walden. Very briefly, the preliminary results we have obtained support our expectations. On the eight attitudinal, behavioural intention, and knowledge variables we assessed on both occasions, residents of Thunder Bay showed significant, positive shifts on seven of them (based on t-tests). The only variable that showed no shift

TABLE 4

BEHAVIOURAL INTENTION TO ATTEND FUNCTIONS

(4 ITEMS, RANGE 4-20)

TO AGREE INDICATES AN INTENTION TO ATTEND FUNCTIONS EVEN THOUGH ALCOHOL IS NOT AVAILABLE

	RELATIVE FREQUENCIES	
	Walden	Thunder Bay
Disagree strongly (4-6)	0.0	0.0
Disagree (7-10)	2.4	3.2
Neutral (11-14)	18.1	21.5
Agree (15-18)	66.6	61.0
Agree strongly (19-20)	12.5	14.2
Mean	8.82	8.89
Standard deviation	2.46	2.55

TABLE 5

BEHAVIOURAL INTENTION TO COMPLY WITH THE LAW

(5 ITEMS, RANGE 5-25)

TO AGREE INDICATES AN INTENTION TO COMPLY WITH ALCOHOL RELATED LAWS

	RELATIVE FREQUENCIES	
	Walden	Thunder Bay
Disagree strongly (5-7)	0.0	0.0
Disagree (8-12)	4.7	5.1
Neutral 913-17)	20.8	27.1
Agree (18-22)	59.7	54.1
Agree strongly (23-25)	14.7	12.9
Mean	10.8	11.34
Standard deviation	3.31	3.50

was on respondents' attitude towards alcohol use. This is not unexpected insofar as we didn't attempt to change their feelings about alcohol use in general, only about the inappropriate use of alcohol in recreational settings. At the same time, residents in Walden showed a shift in only one measure, their behavioural intention to attend non-alcoholic functions.

These results are preliminary, but offer encouragement for the process we have undertaken in Thnunder Bay. Information, on alcohol related incidents at or near these facilities, will be obtained from police reports in both communities, and comparisons will be made in terms of incidents and severity. Our hope is that Thunder Bay will show subsequently fewer problem incidents and these will be of a less severe nature.

ACKNOWLEDGEMENTS

The author would like to thank Cindy Smythe for her skills in analyzing the data, and the administration and residents of Thunder Bay and Walden for their cooperation in conducting the research.

REFERENCES

Levy, P.S. and S. Lemeshow
1980 Sampling for Health Professionals. Belmont, CA: Wadsworth

WORKSHOP

DISCUSSION SUMMARIES

CURRENT ISSUES IN COMMUNITY-BASED PROGRAM PLANNING

CHAIR Ronald Douglas

INTRODUCTORY REMARKS

Robert W. Denniston
Director
Prevention and Research Dissemination
NIAAA
Rockville, Maryland

I would like to raise a couple of current issues, some of which stem from what is generally referred to in the United States as the parents' movement. The parents' movement includes several public interest groups that have formed in response to specific events such as use of drugs in schools, and drinking and driving fatalities, particularly among teenagers. Such groups are often highly motivated but may be narrow in scope; they have a single focus, such as "getting drunks off the road," or "getting marijuana out of schools" and the narrowness of this focus often precludes the involvement of other legitimate groups. In addition, the parents' movement often manifests a good deal of frustration at the government that, in their eyes, has failed to remedy the problem, and thus is alienated from some organizations that could lend expertise and other resources to the effort. Indeed in some cases, researchers, with their perceived academic orientation and their emphasis on waiting to gather and analyze data before acting, are seen to be part of the problem rather than part of the solution. The urge for a "quick fix" solution is transmitted from the public interest groups to politicians and too often results in impatience and a lack of concentrated, sustained effort in alcohol problem prevention. Lack of access to knowledge and technical assistance can strongly limit a community's range of options and may mean that communities end up repeating each others' mistakes. Yet public interest and community groups of all types are important and cannot be ignored, and researchers must learn how to complement such groups.

In the past two months, a group has organized under the name of the National Partnership to prevent alcohol and drug abuse among youth. It is comprised of a variety of organizations, among them the National Federation of Parents for Drug Free Youth, the broadcast media such as NBC, ABC, and CBS, advertising agencies, and a broad range of voluntary and nonprofit organizations, several corporations, and some beverage producers, as well. The goal of the National Partnership is to address some of these current problems, and I think it helps us focus on these issues as well. The Partnership's goals were worked out about six weeks ago in Williamsburg, Virginia. As you may have noticed from the types of organizations that are involved in this group, there ought to be a range of different views among such groups as the beverage producers,

advertisers, and the media. They are all economic stake holders in the alcohol field, however, and they can substantially help or hinder a community's efforts in the area. They are involved in the National Partnership in part because of hearings held in the United States Senate regarding the regulation and perhaps banning of broadcast advertising of alcohol beverages. This was largely generated by the Centre for Science and the Public Interest's SMART campaign to Stop Marketing Alcohol on Radio and Television. Many national groups suscribed to this, while others decided not to go along with it. But in part because of this campaign to restrict or eliminate broadcast advertising, some of the other groups such as the broadcast outlets and the advertisers and the brewers decided to do something.

The goals of the National Partnership are: to promote the right of young people to grow healthy; to prevent self-initiated early experimentation with alcohol and drugs; to increase awareness and availability of alcohol and drug treatment services for youth; to increase the availability of promising and effective preventive approaches to alcohol and drug problems; to promote social disapproval of drunkenness; to eliminate all use of illicit drugs by youth; to eliminate all use of alcohol by underage youth outside parental supervision and liturgical functions; to eliminate non-medical use of prescription drugs by youth. In considering these goals in the light of current problems and in the context of remarks made this morning, I see a number of issues. To a certain extent, this program raises the question of single focus, event-oriented groups such as Mothers Against Drunk Drivers (MADD), which some people see as an issue. MADD is less interested in per capita consumption or in chronic problems; they simply want to get drunk drivers off the road and their singlemindedness may interfere with the direct involvement of other legitimate groups. The example of the National Partnership also raises the question of involving the stake holders in the alcohol field. For a comprehensive prevention program to be put out by a community, you have to involve a critical mass of organizations, presumably the state or local government body involved, some of the public health groups, the brewers, the broadcast media, other media, and so on and so forth. The economic stake holders are an issue because with or without pending legislation it is difficult to expect to have these community groups working very well together with different goals in mind. A minimal requirement for one group (say the decrease of the number of outlets in a community) will antagonize the distributors and it will be extremely difficult to get a critical mass of all the community groups together.

Another issue that came up at a meeting of the National Partnership a couple of weeks ago in New York was the lack of access to knowledge about what works, what has been tried, what sort of evaluation has been implemented, and so forth. We need to provide the technical assistance

and knowledge base for the community groups, so they can choose from one of the beneficial interventions available. In addition, the need for a simple, straightforward message, while important, should not replace thoughtful, tested messages, especially for youthful audiences. A group called Students Against Drunk Drivers (SADD) in the United States has a program wherein students sign a contract with their parents and each party agrees not to drive if they have been drinking. This appears to be a mixed message which tells youngsters that it is okay to drink as much as they like, as long as they do not drive or get in a car with someone else who has been drinking. SADD and MADD have very different points of view on this issue from the National Federation of Parents; all of these groups have a strong commitment to the community, but if they cannot agree on what kind of message should be given to youth an opportunity is lost.

I mentioned earlier the "quick fix" camp, and it is apparent that many of these groups are not patient. They figure that the government is part of the problem rather than part of the solution, and are frustrated and impatient with the researcher's caution. It is clear that community groups will not await final answers from prevention researchers before beginning their efforts. In this situation of urgency and impatience, several factors are paramount. First of all, the urge to "parachute" programs into the community should be stemmed. Instead, tools with which communities may define their own problems and devise their own solutions should be honed and applied. Tied to this knowledge transfer should be access to the data relevant to the communities' need, such as per capita consumption, and assistance from researchers in explaining underlying theory and options for strategy selection. Thus, the "trickle down" of research findings should meet the "bubble up" of community groups. Secondly, and in the same vein, the "critical mass" for communities' actions need to be defined by those communities. It may be necessary to involve parents, schools, governments, politicians, producers, distributors and media in some communities, while other communities may need only several of these groups. Mobilization should await neither consensus nor the selection of an intervention strategy. The dynamics of community groups are volatile and cannot be ignored. Prevention researchers should provide knowledge, experience and technical assistance whenever possible, perhaps without excessive expectations. We may need to treat such groups as "natural experiments" or "insurmountable opportunities."

DISCUSSION

Several broad issues were identified in this discussion:

1. Information about program approaches; successes and failures
2. The popularity of incremental "quick fix" approaches versus sustained multi-strategic approaches
3. The need to shift focus from the individual to community ownership of alcohol problems.

1. Effective Programs, Community Demands and Research Findings

A major topic of discussion in the workshop was the difficulty of finding out about effective programs. For practitioners, program reports in the literature lag behind community needs. Professional journals, personal networks, and the media are the most common sources of information about program developments in the field. There was general concern that the various media, while they are effective vehicles for information dissemination, often distort program intents and results for the sake of drama or human interest. The media often perpetuate popular notions in part because newspaper writers and television interviewers are themselves uninformed about the nature of the problems. Recent examples cited by discussants include a parents' program in Florida to ban alcohol at high school proms. The parents claim a direct connection between the program and fewer impaired driving deaths among teenagers. The media uncritically report this claim and another "good idea" is picked by parent groups in other communities as the solution to the problem of teenage drinking and driving. Information about effective programs, that is programs that have been objectively evaluated, is hard to come by, and discussants frequently noted the general public's impatience with the delayed and often equivocal conclusions offered by research.

Another dimension of the concern about information accessibility and distribution is the problem of translating complex information into simple, readily understandable messages for the public. As one discussant observed, community audiences want to know "what works" and they often question alcohol workers and scientists about research findings; it is, however, frequently difficult to present the findings in a comprehensive or definitive way. This problem occurs in the prevention field among practitioners and researchers, the former often looking for information about effective programs to guide current program development, and impatient with the relatively long time it takes to evaluate programs and publish findings. There is a sense of urgency in the field these days due to the impatience of community groups with what they perceive as government lethargy; these groups are pushing ahead with solutions to problems as they see them.

One participant said:

"It is perceived that researchers are saying, let's not do anything or else let's spend another ten years doing research on individual problems before we can do anything, since nothing by itself seems to work v e r y well. In response, the communities are saying we don't have ten years to wait, some 47 kids died in our community last year. As a result, there is this tremendous impatience with research findings, and with gathering research information. It could be that the research that has been done is just not imparted well enough and carefully enough at the community level so that people can understand what the options are."

However, the community groups still want to know, not all the bits and pieces of data, but "what works". For example, in presentations in the Toronto area, the local people wanted to know if the R.I.D.E. program (Reduce Impaired Driving Everywhere) had an impact.

When a particular program has been in place for a while, there may be a tendency to ascribe positive changes in the drinking environment in the community (such as no deaths from alcohol-related crashes) to the program. However, there may be many other factors, not considered in the single variable assessment, that could have contributed to the changes observed.

2. Competing Interests: Who Owns the Problem?

This ground swell of citizen advocacy has also had the effect of isolating community alcohol prevention program workers from certain spheres of community-based prevention activities. Advocacy groups tend to see workers and scientists in the field as "part of the problem." In addition, there is a tendency, as Bob Denniston observed in his opening remarks, for these organizations to have only one focus and to see their solutions as the solutions to the problem. It was recognized that many of these community groups expect immediate results to their actions and are not interested in longer term rational planning or collaborative efforts.

Furthermore, if programmers or researchers are not responsive to the demands of the community, there will be at least an indirect impact on the funding of the organization. Financial pressure may lead the researcher or programmer to offer or tolerate "quick fix" interventions, even though he or she may have serious reservations about this route.

It was acknowledged by several of the discussants that many single focus groups cannot tolerate goal diversification for quite legitimate reasons. They do not have enough resources to diversify and, by the very nature of the group, they must be somewhat evangelistic about their goal in order to maintain the commitment of their members. Such energetic commitment may be diminished by the diversification of goals, or by alliances with other like-minded groups.

For the community developer, or the prevention theorist, this poses problems. The discussants recognized the importance of a multifaceted approach to community prevention efforts. The principle of involving broad coalitions of individuals and groups from all community sectors was repeatedly acknowledged. At the same time, it was recognized that there will always be communities of interest and therefore conflicting interests. The practitioner's task is to develop broad based community support out of these diversities of interest. The practitioner must encourage the various coalitions to retain their individual views while somehow channelling community action in the direction of common community goals.

3. Need for More Attention to Strategies to Change Social and Political Structures

There was general agreement that while educational strategies were the ones most used to change the communities' attitudes and behaviours towards alcohol use and its consequences, much greater efforts must be made to influence structural changes to support changes at the individual level. Theorists and practitioners alike recognize that policies are the underpinning of social change. There is still a deep schism in the community between alcohol prevention program workers who recognize the critical importance of control policies to restrict availability and so reduce adverse consequences such as health risk and other damage, and community groups, politicians and other public officials who support programs that have the effect of punishing certain categories of consumers.

Nevertheless, it is appropriate to make the community aware of their level of drinking and their rates of alcohol-related problems. In the short run this may not have an immediate impact; but in the long run there may be an occasion in which the general patterns of alcohol use can be tied to a particular incident which catches the public's attention. This groundwork of educating the community about alcohol proves useful when the key actors are prepared to take action. One particularly important technique in encouraging an interest in alcohol issues is to make the participants of the drinking event aware of the liabilities. In Thunder Bay a child was hit by a chair thrown by a drunken patron of a recreational facility. This incident eventually led to revising the policy of providing alcohol at recreational facilities. By focusing on the liabilities of the incident in question and of incidents like this that may occur in the future, it is possible to mobilize the interest in the broader issue after the particular incident has passed.

The "multifaceted approach" to prevention programs throughout the discussion reflected the discussants' beliefs that structural or environmental or social policy were interdependent components of effective prevention approaches, together with public education and citizen-advocacy measures.

One discussant observed that the tremendous demand on the school system as the agent for altering attitude and behaviour is unrealistic and is generating a backlash from educators.

The civil rights issue was raised and discussed. It became clear that the civil right of individuals to indulge in risky drinking practices versus the collective will of society to limit such practices, has created tension throughout society. One discussant noted that in some states legislators may be increasingly reluctant to pass certain kinds of "social" legislation, interpreting them to infringe upon the rights of the individual. The example cited was the recent actions of several state legislatures in turning back proposed car seat belt legislation, apparently reflecting the mood of the community that individuals are responsible for their own health and safety. If this attitude prevails there may be resistance to the restriction of alcohol sales or opposition to more severe enforcement of drinking and driving offences.

Conclusion

In conclusion, there seemed to be general agreement that the major issues confronting the development of programs to reduce alcohol problems in the community are related to an adequate public awareness and understanding of the nature of the problems and options for action; the development of mechanisms for information dissemination about effective programs; and more adequate program evaluation. There was considerable discussion regarding coalition building and the need to identify constituent groups in the community capable of taking action. Finally, discussants reiterated the importance of focussing on political and environmental changes necessary in our social structures to support individual behaviours regarding alcohol use and drinking practices. It was acknowledged that while educational strategies were a potent and frequently used strategy to change behaviours, these strategies were effective only in conjunction with a strong, voluntary citizen group support base and with appropriate and adequate changes in legislation.

STRATEGIES AND APPROACHES TO BUILDING CONSTITUENCIES

CHAIR Friedner Wittman

INTRODUCTORY REMARKS

Larry Hershfield
Regional Director
Addiction Research Foundation
Toronto, Ontario

It has been mentioned a couple of times this morning that there is a beer strike in Toronto. So in the spirit of Megatrends, I did a quick content analysis. Toronto is a major market; it is very media intensive, with three newspapers.

The morning paper is the Globe and Mail. In many people's eyes this is Canada's national newspaper. The papers in Toronto, unlike many other markets, are not divided by political parties or philosophy, but tend to reflect class differences. So this would generally be the paper for the higher socioeconomic classes. They have a very respectful article about the strike: "Walk out of Brewery Workers to Continue." This deals strictly with the labour issues, the Union's position and the tentative agreement and so forth.

The Toronto Star, which is the middle class paper, and the one which I read most frequently, has an article entitled "Breweries Ask Unions for Second Vote on the Contract" and a story, the title of which is "Metro Area Residents Fed Up with Beer Drought", continuing on page A17. Because of the beer shortage and the availability of American supplies, convoys are bringing in large supplies of American beer. So this is the comment and consensus: "Many metro area residents say they are fed up with beer drought and stock of overpriced and watered down swill from south of the border" and some are demanding government intervention to settle the walkout, according to a random sampling of opinion. The bartenders say the Government should step in and do something about it: "I used to be a beer drinker, if this nonsense keeps up I might just keep drinking rye." That is the gist of that article.

You will notice the tabloid format of the Toronto Sun. The heading on top "Shed a Tear, Still No Beer" directs the reader to page 3: "Weep in your foreign suds, beer lovers, no domestic brew today but there is hope. Ontario's 450 beer stores will remain closed today after the big three breweries ...", etc.

We conclude from the quick content analysis that there has not been one mention of the possible benefits of the strike - there may be decreased alcohol-related arrests, violence, drinking and driving incidents. I don't see anyone saying there are alternatives, or questioning the necessity of beer. There are no statements from consumers' associations, anti-smoking groups, the Addiction Research Foundation, Chapters of the Canadian Addictions Foundation, our honoured American guests (or the Prime Minister of Israel, who is also in town). The news is strictly that we are suffering, that we are hurting, but there is hope that the strike may be settled soon.

I am offended by this one-sided viewpoint. I know we have a lot of resources to draw on. I work closely with scientists, educational consultants and others, people who are capable of developing very impressive-looking educational materials and analyzing policy issues. I know there is a lot of concern out there. I know that there are things that we or other people could say, but quite frankly, I do not know what to do. Can the group address the following issues?

1. Is this an appropriate time or point of intervention? Is this the type of circumstance in which someone could rise and address attitudes and knowledge levels? If not, what are more promising types of situations?

2. Which constituencies should be mobilized? Which are the ones that can be really effective and helpful? Are there others we are obligated to include?

3. Are all the things we have learned at the conference applicable to a community as large as Toronto, whose media are intensive and complicated?

4. Are the public and the media communication target groups or consumers of services? Are they citizens with democratic rights that facilitate their involvement? Are they people that can deal with the facts, economic models, and scientific fact, or are they really just angry people driven by self-interest, who have been victimized? How should we approach them and what are the strategies and techniques?

DISCUSSION

The discussion raised several basic questions about this topic:

1. How to raise communities' interest in alcohol prevention issues?
2. Who are the key constituents? Are they programmers, planners, policymakers, or are they community lay groups or professional organizations?

3. What are the strategies for identifying and building the constituencies?

1. Raising an Interest in Alcohol Issues

In general, constituency building is considered to be either the organization of existing groups, or the creation of new groups to develop policy at the local or broader levels.

The introductory remarks incorporated a case example, current in Ontario, involving the lockout of unionized brewery workers by the brewing industry. This led to a discussion of what issues public health interests should use to mobilize community or government actions. There were divergent views about whether the Ontario beer lockout was an issue or not and which prevention-oriented organizations should take a stand.

One person asked who has the responsibility to raise awareness of the prevention and health-related aspects of consumption. Another asked how to focus the media's attention on other aspects of the issue, besides hardship for the drinker or the tavern owner.

Some participants felt that the media and many sectors of the general public now see prevention strictly in terms of temperance or abstinence. Therefore, they would have a great deal of difficulty in seeing this reduction in beer supply in any positive terms. "Natural" events such as a beer workers' lockout or strike provide opportunities for taking a public stand on the availability of alcohol. Media events may be created in order to do the same thing, but it is unfortunate to have to pass up opportunities that present themselves through changes in the industry.

One participant noted that the media are more sophisticated in their understanding of the issues in a community where dialogue on alcohol problems had been going on for several years. In these cases, media reporting is more comprehensive and the information is more accurate.

2. Seeking Constituent Groups

It was clear to the participants that the constituencies for alcohol prevention are not obvious. Interest groups oriented to health, social issues, religion, consumer issues, the environments and families of victims might be potential allies. However, it was noted that constituents change from issue to issue: for example, some of the groups that can be mobilized around drunk driving issues will not be particularly interested in availability or control issues around alcohol pricing. It was noted that issues must be made specific, and must be clearly understood and perceived to be manageable.

In the areas of treatment and rehabilitation of heavy drinkers, the constituencies are more firmly established and broadly based, and have stronger resources. There was some disagreement about whether or not constituent groups oriented to treatment and rehabilitation are too narrowly focussed to take an active interest in preventive actions. However, it was recognized that there might be possibilities of creating alliances with the treatment and rehabilitation interests, especially with "kindred groups" such as people concerned with physical health and well being, with community safety in the workplace or on the roads, or with physical fitness and diet. These kindred groups could be further involved in discussions about alcohol policies.

Other participants took different positions. For the most part, the media were seen to present a very one-sided view of the lockout of the brewery workers and the reduced supply of domestic beer. It was noted that there were few, if any, comments about the benefits of reduced consumption or about the persistance of some consumers to find sufficient beer; in fact, most media accounts treated the strong urge shown by some beer drinkers to find their favourite brew as normal, and in some accounts the media provided lists of locations where domestic beer affected by the lockout was still in stock. Furthermore, the lockout situation as presented in the media tended to shift the discussion to one about dismantling the current beverage alcohol control system.

It was noted, for instance, that the views of only one provincial government ministry, namely Corporate and Consumer Affairs (which has responsibility for regulating the distribution of alcohol and licencing outlets) was reported in the press. And the key issue according to the media was economic hardship for operators of licenced premises.

It was felt by some participants that these views should not be promoted unchecked, and that health-oriented interests should raise questions about the lack of critical reporting in the media. Even if there was little to gain in policy terms from this particular situation, the public had the right to know that there was more than one viewpoint about the implications of temporary restrictions on domestic beer.

The discussants also noted that restrictions on the international trade and transport of beer were relaxed during the lockout period; in effect, there was a policy change. This temporary adjustment in regulation by the government probably reinforced the impression that a negative interpretation of the lockout was an appropriate one, and that a general deregulation of the alcohol distribution-sales systems should be considered. In general, it was felt that the one-sided handling of the lockout by the media was not conducive to a policy debate on the issue. While there was no consensus about which issues should be chosen for prevention initiatives, there was some agreement.

Another type of constituency includes retailers, as well as those involved in manufacturing and distributing alcoholic beverages. Some of these are becoming involved in prevention agenda because of the increasing possibility of serving liability practice. Their involvement can be encouraged through server intervention training, and through established policies for responsible sales. Other examples of this constituency include parks and recreational departments, or community service clubs which request special occasion permits to sell alcoholic beverages. These groups may also be drawn into developing responsible policies for serving alcohol and managing their patrons.

Advocacy groups such as social action, social planning, and mental health organizations with a prevention mandate, are other constituents that were identified.

We should not forget that at risk or heavy drinkers may also be used to develop support for prevention activities. Heavy drinkers who are seriously concerned with the risks associated with consumption, or former heavy drinkers, may take part in community actions against alcohol problems.

3. Strategies for Building Constituencies

The participants offered some observations regarding difficulties in their own roles in developing prevention constituencies. There are three main points: organizational responsiveness to prevention opportunities; constraints on interest-group action; and mechanisms for coordinating various interests.

In order to respond to issues as they arise, the key actors have to be flexible in terms of their time and activities. In institutions those active in prevention may be locked into programs which limit their freedom to deal with an issue when it arises.

Nongovernmental agencies have the greatest potential for making an impact on prevention agenda. In drinking and driving issues, for example, it was these grassroots groups that were most instrumental in promoting change. However, both research departments and prevention oriented programs of government agencies brought drinking and driving to public prominence.

Grassroots activities are required in order to make an impact on alcohol problems, but so are lobbying and policy initiatives at the highest levels of government and industry. Various interests may be drawn together through creation of alliances or a council. One example from the United States is the Council on Alcohol Policy, part of the National Association of Public Health Policy, which fills an important role in this regard.

The participants also noted a shift in the definition of prevention: about 10 years ago it was sometimes defined as "early identification", now it is identified more closely with such areas as "environmental change", "structural factors" and "health enhancement". As the agenda and focii of prevention efforts broaden and become more basic, it is likely that both constituencies and strategies will change as well.

ENVIRONMENTAL CONSIDERATIONS IN ADDRESSING PROBLEMS OF ALCOHOL

CHAIR Harold Holder

INTRODUCTORY REMARKS

John McCready
Regional Director
Addiction Research Foundation
Hamilton, Ontario

When I was studying for my Master's degree, I soon found out that there were personal problem theories and environmental problem theories. The bias I had at that time and the one I have retained, favours the environmental change strategy as an approach to problem solving. This view, it seems to me, is the one shared by the Symposium participants and it fits with the topic for this discussion group and much of the evidence that has been presented at the Symposium.

In this short presentation to begin our discussion, I will briefly address four topics: (1) I will suggest some evolution in thinking and programming: (2) I will offer a proposal for a preferred approach to our endeavours; (3) I will make reference to a change in our lexicon; and (4) I will propose a specific environmental change strategy.

Much of what has been discussed at the Symposium has been rooted in our understanding of the Consumption Curve. Likewise, the presentation of the Well-Ill Continuum has underpinned our discussion. The Consumption Curve might be considered as a reseach framework. It allows us to consider that availability and price are two important environmental factors which determine the extent of alcohol problems. The Well-Ill Continuum has been presented as a program framework. It suggests strategies related to risk avoidance and risk reduction.

Both these frameworks describe the use of alcohol as dynamic with some movement from left to right and right to left. The frameworks also suggest that problems are concentrated on the right-hand side. The two frameworks provide a strong indication that environmental change is logical and desirable.

Throughout the Symposium, we have had our attention drawn to the importance of the environment. The Consumption Curve framework draws our attention to the environmental factors of availability and the Well-Ill Continuum provides a basis for trying to change the environment. Indeed, there has been a whole variety of factors identified with respect to the environment. In describing the context within which alcohol is consumed, culture, social norms and social obligation to serve are environmental

factors to be considered. With respect to public drinking, time of drinking, length of stay, size of group, action of servers, physical environment and alcohol availability are all factors related to the extent of drinking. The activities of the alcohol industry play a part in shaping the environment; such factors include production, distribution, sales and advertising. Other environmental factors are related to government, and the importance of policy and regulation. We know that governments control the extent of alcohol availability, and deal with taxation, licencing and minimum ages. Other environmental factors affecting consumption include the number of outlets, types of outlets, presence of happy hours, hours of sale and days of sale. We've been told of interactions which take place with respect to the factors described above. In addition, it's been pointed out that the actions of government have generally been toward greater liberalization. We've been told of certain contradictions in respect to attitudes and actions. For example, it was explained that Canadians feel obliged to serve but are against drinking and driving. Yet many Canadians will serve their guests large amounts of alcohol knowing they will drive home. We have noted that there is a public interest for health promotion and the prevention of problems, but there is a public fiscal benefit dervied from alcohol taxation, profits and employment.

I'd like to suggest that there has been an evolution in our field with respect to the approaches used to deal with alcohol. The first approach may be referred to as the treatment intervention. Here, the efforts are aimed at casualties and the approach is therapeutic in nature. The focus of this intervention is on individuals and problems. The solutions are programs and treatment.

With this approach, it is difficult to define the population. Not all alcohol problems are associated with alcoholics. Alcoholics make up the minority of drinkers and only a small percentage of alcoholics seek treatment. There are general indications that suggest the worse the problem becomes, the less likely there will be improvement. There is no consensus about how to pursue the treatment intervention. We know that relapse is high and although this is an over-simplification, one-third improve, one-third do a bit better and one-third realize no improvement. It is in the treatment intervention approach where most of our resources are invested. The best advice has become to pursue treatment, but to do so by the least expensive means possible. I clearly support the provision of treatment and by the most cost-effective means. I don't believe, however, that treatment intervention will allow us to catch up with the problems and nor do I believe the treatment intervention can manage all the problems or address the environmental concerns.

The second approach may be referred to as the education intervention approach. Here, the efforts can be described as cognitive and affective. The focus is on groups and avoiding problems. The solutions are considered to be educational programs.

Generally, the education intervention is underpinned by the idea that knowledge, attitudes and behaviour are related. However, the relationship between and among these variables is not completely understood. Consequently, there is variation in the application and approach to education intervention. In fact, you could argue that there is no consensus at all. At best, one believes that education can increase knowledge and change behavioural intention. At worse, the educational approach may tend to increase consumption.

It is difficult to believe that the education intervention will ever catch up and prevent all problems associated with the use of alcohol. In fact, it may be idealistic to believe we'll ever unlock the solution to effective education. The educational approach will need to compete with the environmental factors which contribute to consumption of alcohol and the development of problems. I support educational interventions, but I believe they will continue to have certain limitations. I believe the educational approach is most effective when used in conjunction with other approaches.

The third approach may be referred to as community intervention. This approach was characterized as normative. Here, the focus is on community members and groups. The other part of the focus is on the reduction of community problems. The solutions are program actions at the community level.

There are some recent, exciting and interesting developments with respect to the community intervention. However, the community intervention approach will only be effective where there is cooperation. A community not receiving the same type of attention will certainly not have the arising benefit. The community approach cannot deal with everything. It is by name and nature a local intervention. Much can be done outside of the community to influence the environment. I support community interventions, but I believe they should be pursued with a view to demonstrating approaches and creating the environment within which other changes may be made.

The fourth type of approach has not been employed as much as it might be. It is this type of intervention that I believe is the preferred one for dealing with environmental matters. This approach can be referred to as policy intervention. Here, the orientation is to health or public health. The focus is on society and risks. The solutions are policy actions.

We have already been advised of the absence of alcohol policy, the competing actions of government and a general tendency toward liberalization. Through policy intervention, I believe we have the best change to significantly influence the environment. The policy intervention approach deals with the most number of people. It offers structural change and, therefore, can be long-lasting. It is, perhaps, the only means by which a comprehensive alcohol policy can be established to shape the environment within the public health perspective. The policy is not established at the individual, group or community level, but at the higher levels within a given jurisdiction. We've been advised that policy is shaped by the leaders, by the elite and that decisions are made at the top. If we really want environmental change, then we have to address changes in policy.

I believe the policy intervention approach is the preferred one because it most clearly addresses the possibility of environmental change. It also allows us to draw support from special interest groups and contribute to changes in practice, norms and cultural context. It requires, perhaps, the complementing activity of community interventions. However, I believe addiction workers and organizations must be prepared to engage in proposing policy actions and environmental changes.

The next matter I want to address pertains to the lexicon. Quite frequently, we are told of "control measures". I take some exception to the use of the word control. This word does not, in and of itself, emphasize the positive and, presumably, beneficial aspects expected from each control measure. If we are to meet our health promotion objectives, I believe we could draw upon other expressions which do embrace the positive outcomes desired. The substitute language includes "public health perspective", "environmental change", "policy action" and "health promotion/prevention". The simple point here is that the word control has a connotation that does not easily draw upon support for the meritorious aspects of health promotion endeavour.

Finally, I would like to shape the discussion by proposing a means for creating environmental change. Obviously, this is in the policy action area and is, quite specifically, differential pricing for alcohol. Simply stated, I am proposing that policy needs to be established that shapes the environment by embracing a differential price structure for alcohol. This policy would need to consider taxes, profit and price. In introducing differential pricing at the provincial or state level, real environmental change would take place. I believe this type of change will further our health promotion objectives of risk avoidance and risk reduction and, thereby, reduce alcohol problems.

In essence, what is needed is a calculus for pricing beverage alcohol. It would be introduced with a base price established for alcohol. My suggestion is the base price reflect current pricing and from the base price would be an increasing price differential based on the amount of absolute alcohol. There should be some consistency of pricing between beverage types (beer, wine and distilled spirits). By significantly differentiating the price of absolute alcohol, a financial incentive is created for individuals to be attentive to risk avoidance and risk reduction. At the same time, the consumer, tavern manager, member of the industry and the state, all benefit. All can purport to be interested in health promotion and the public health perspective, while still retaining the benefits derived from the use of alcohol which include drinking, making money and raising public revenue.

The type of differential pricing I have in mind would take place at the exchange point between distilleries, wineries and breweries and any form of public outlet. At this point, the differential would apply upward from the established base price. For example, the brewers of beer would sell their beer at a base price related to the current price of light beer. Beers which contain more than 2.5% alcohol would yield a greater amount of money. In turn, the sale of all alcohol would necessarily reflect an increase according to the amount of absolute alcohol. This would create a circumstance where there would be more revenue available. Consequently, the profits for the brewer and tavern manager could be increased for those beverages of greater alcohol content. Likewise, the state would benefit from receiving larger proportions of revenue from the sale of higher alcohol content beverages.

It is through such means that the environment may be changed in favour of health promotion objectives. No one loses with this approach. Individuals still have alcohol available for their use. They retain the choice to use alcohol and, in the event they seek greater risk, they have to pay greater amounts of money for it. They have, beyond the meritorious idea of preserving their health, a clear incentive for risk avoidance and reduction. Likewise, the tavern manager and members of the alcohol industry will continue to cover their costs and make even more profit from the sale of higher alcohol content beverages. The state, in turn, notes its interest in good citizenship and public health considerations. At the same time, the state and the alcohol industry are likely to increase their revenue from the sale of beverages which are not as "light" as others.

It is highly unlikely that such a pricing policy will eliminate the sale of higher alcohol content beverages. By introducing the change at the exchange point, the effect takes place with public and private drinking. As you will recall, a considerable amount of drinking is done in the home. Consequently, it is necessary to effect the differential price for the drinking which is done in private homes.

It is through the development of a differential price policy that the environment can be changed and health promotion objectives realized. Everyone, seemingly, wins in this situation because alcohol remains available and health is not placed ahead of profit and revenue.

DISCUSSION

While the introductory statement by John McCready noted several aspects of this topic, the group's discussion focussed on differential pricing as a major technique for affecting the drinking environment. The highlights of the discussion were the following:

1. In what way is pricing an effective technique in alcohol problem prevention?
2. How might differential pricing be implemented in order to have the greatest impact?
3. What are the expected repercussions of a differential pricing policy?

1. Pricing and Alcohol Problem Prevention

There was general agreement that pricing is an important component of effective control measures, especially with regard to the health of heavy drinkers. All of the participants were interested in the potential impact of differential pricing, although there were disagreements as to what the impact would be and how such a policy would be put in place. By differential pricing we are referring to a policy of pegging the lowest alcohol content beverages - e.g. light beers - at a level that is similar to the price of regular beers, and then raising the price for other beers and alcoholic beverages according to their alcohol content.

However, the workshop participants did not agree as to how important pricing was to the overall drinking environment. One participant noted that there had been pricing policy discussions among alcohol researchers for many years, but these discussions and recommendations didn't, at least according to the Ontario participants, seem to go anywhere at the fiscal or social policy level. The alcohol beverage industry is essentially concerned with profit points as opposed to public health factors, and will only respond to the latter if required to do so.

Several views emerged from the discussion. One was that the discussants acknowledged the importance of pricing on alcohol sales levels; but they were also aware of the relevance of other aspects of availability, and placed considerable importance on weather or the season, for example, as an "environmental" factor. There was recognition that altering the price of alcohol to control at-risk consumption had a potential disadvantage as well. As one participant noted: "urging consumption of low alcohol

beverages will likely have the effect of recruiting new drinkers to the market, and so offset any efforts to increase the pool of abstainers in the population."

Increasing the number of abstainers in society is a prevention strategy; it was suggested that the abstinent proportion of the population formed an "anchor" on the rate of consumption and thus served as a drag on the size of the pool of heavy drinkers.

Abstainers figured again in the discussion when it was observed that, while abstainers were not paying directly for alcohol beverages, they were still paying for health, social service and law enforcement costs related to the consequences of heavy consumption. Some compensation in addition to preferred automobile and other insurance rates might be considered; however, it was not clear what these additional incentives might be, nor was there agreement that this was warranted.

It was noted that to some extent there is already a de facto policy of differential pricing, but that it is not consistent with public health aims. One anomaly in Ontario is the low price of a bottle of domestic fortified wine. In terms of alcohol content this is below the price of other alcoholic beverages and this is probably a central reason for its being population among skid row drinkers. However, premium strength beers (6.5% in Canada) were priced higher than regular strength beers (5% by volume). Furthermore, even the cheapest domestic spirits (40% by volume) were higher priced than other alcoholic beverages per volume of alcohol.

Another amendment to the price differential proposal was that of reducing the concentration of alcohol in the beverages without adjusting the price. This is really the flip-side of price differential, and may be quite different in terms of the psychological and social impact on the consumer. For example, reducing 40% alcohol-by-volume-strength spirits to 30% alcohol-by-volume, would reduce the absolute alcohol ingested by 25% for each bottle of spirits consumed. This change would benefit the producers since there would be less cost but the same income, and it would be expected to have a health benefit for the consumer.

2. Implementing a Price-Differential Policy

Several ingredients were considered critical to implementing a price-differential policy: these included strong citizen interest in such measures; demonstration projects showing the positive impact of price differentials; position papers and policy proposals at the highest policy making levels; and ongoing mobilization of community and public health interests on this issue. It is not clear whether it would be possible to achieve the effective convergence of these various factors, but it seems that health agencies might be encouraged to be less timid on policy issues than they had been in the past.

In general, the participants agreed that both solid informtion and strong pressure were required in order to make changes in the policy area. A case in point is the policy towards drinking and driving. Information on the damages from alcohol-related driving incidents was available for quite a while, but it was only when political pressure and public opinion were mobilized by pressure groups that the information became an effective component in changing legislation and practice.

In implementing policy changes such as price differential it would be important to consider what this would mean to various interest groups such as the producer, the tavern owner, and consumers groups, who might not all react the same way.

3. Repercussions

Among the possible repercussions of a differential drinking policy was the view that abstainers would be attracted to drinking if there was a wider price spread between alcohol beverages. It was felt, however, that the few cases where this might happen would not be sufficient to overshadow the positive impact of regular drinkers switching to lower alcohol beverages in order to take advantage of the lower prices.

Also, if the price of the lowest strength beverage alcohol did not drop below the regular price of domestic beer, then beverage alcohol would not be seen as a refreshment that would compete with non-alcoholic beverages. From this discussion it appears that in order to keep above average rates of abstainers from becoming drinkers, it would be necessary to maintain a price difference between alcoholic and non-alcoholic beverages.

Another confounding factor is the normative climate with regard to beverage alcohol prices. If the prices are already considered too high by the majority of the population then further changes may be considered impractical by policymakers. One participant noted that we tend to exaggerate the resistance to control measures in the alcohol area; from his experience on two initiatives, there has been resistance but never to the extent expected.

Several other environmental factors were identified but not discussed at any length. They included addressing community public health problems by attempting interventions to affect morbidity and mortality rates; by identifying advocates at national policymaking levels; and by strengthening the links between policymakers and citizen-advocate groups who seek specific solutions compatible with those policies.

There was a strong thread throughout the discussion of the urgent need for practical data that would help in the design of prevention programs and identify indicators of change other than morbidity and mortality.

LINKING RESEARCH, EVALUATION, AND COMMUNITY INTERVENTIONS

CHAIR Robert Simpson

INTRODUCTORY REMARKS

Honey Fisher & Marc Lennox
Researchers
Addiction Research Foundation
Toronto, Ontario

We are going to present an extreme position that illustrates the relationship of research and community intervention and some of their convergences and divergences. Our intention in this debate between a hypothetical researcher and community developer is to stir up some controversy and provoke discussion.

RESEARCHER

So, Mr. Community Developer ...

COMMUNITY DEVELOPER

Yes, Ms. Researcher ...

RESEARCHER

When I do research, I clearly state my goal and put it in the form of a hypothesis which has measurable objectives. I have a clear methodology to test my hypothesis and a study that is well controlled. With this sort of study I can examine the effectiveness of my program.

COMMUNITY DEVELOPER

I, too, have a goal. I seek to change behaviour within a community via a community intervention. I go into the community, do a needs assessment, and then I tailor a program to fit the needs of the community. Alternatively, I may go into the community with a prepackaged program, without first doing a needs assessment. The next step is to evaluate the program in terms of whether or not the behavioural change was effected.

RESEARCHER

Yes, but how can you assume any outcomes or any behavioural changes can be attributed to your program and not to a variety of other factors? You don't have pre- and post-intervention observations or measurements. You don't have any control and experimental groups. How, then, can you determine any impact or know whether or not your hypothesis is supported?

COMMUNITY DEVELOPER

Well, that is perhaps where we draw apart. The community is not interested in hearing whether or not you have supported your hypothesis. The community is interested, rather, in seeing behavioural changes. That is real evidence to them. They want to hear the results in simple laymen's terms, with no confounding jargon. The evaluation I do is continuous. I am continuously observing the state of affairs and am sensitive to the community. If changes seem warranted, I am flexible enough to alter my program to meet these demands. In this sense, my operation and interventions are dynamic ones, not static. Therefore, it is futile to attempt to apply strict and simple experimental designs to complex community programs because they are "constitutionally resistent" to precise measurements and experimental manipulations. If the emphasis is placed on input and output measures, you are disregarding important information about the process of the program. Analysis of the process can reveal reasons for success or failure and is therefore indispensable for making improvements in programs.

RESEARCHER

Yes, but certainly observations, haphazard guesses and personal testimonials should not be presented as evidence in lieu of good empirical studies. If you haven't set up a formal evaluation of your intervention, how can you determine its effectiveness? And furthermore, how can you justify any of your activities to funding agencies, and to the community?

COMMUNITY DEVELOPER

I don't see the methodology and its elegance as the priority; it is merely a means to an end. I am not operating within a laboratory. The methods I use can be adjusted as I go along, and as I stated before, I can continually make improvements since the end goal of modifying behaviour is the priority. And perhaps I should state that community interventions should not be viewed as being as rigid or linear as research might be. Unforeseen issues in the community become problems which must be addressed and the program and the plans for the program must be altered. The program does not have to be thrown out or seen as a failure simply because

things did not go as planned and modifications had to be made. Perhaps a middle ground would be to document the so-called "failure", document the process, and look at the reasons necessitating changes and learn from this.

RESEARCHER

However, to make changes as you go along is expensive not only in terms of money, but in terms of time and effort. It is more efficient if more time is spent in the planning stages, where the modifications can be made beforehand on paper, to minimize the risk of later error.

DISCUSSION

The discussion centred around identifying some of the key issues in linking research to community interventions and identifying steps that participants thought necessary to promote program research -- that is, research with practical program implications or programs with an evaluation component.

The major topics addressed by the participants were:

1. The natural tension between research and community-based programming
2. Program evaluation for whom?
3. Determining the "appropriate" level of research
4. Data collection: assessing needs
5. Barriers to linking research and program development

1. The Natural Tension Between Research and Programming

There was general agreement that there continues to be significant conflict between the interests of the programmers and the researcher. It is recognized that the study of alcohol problems is a relatively young field with a scant literature base which is often three or four years behind practice. As a result the literature is not reflective of the state of the art. Program development often moves relatively quickly and even while an evaluation component is integral to the project, aspects of program development which are found not to be working are often altered or abandoned, leaving the research in shreds. Often the researcher's tools are not applicable to real life situations; it can be difficult to obtain reliable program measures with the same unequivocal standards found in clinical research. This "dynamic tension", as one discussant described it, is likely to continue for the foreseeable future even though there is increasing evidence of interdependence of effort in program development.

One participant thought that it was possible to resolve this dynamic tension to some extent by being explicit about the evaluation process to be followed, and for the researcher and programmer to reach agreement on expected outcomes and the means by which to measure these.

2. Programme Evaluation: For Whom?

Another issue addressed was the question of to whom evaluation results are being directed. Are they for the policy makers and funders? For the community in which the program takes place or for the one in which the program may occur? For the researchers? Or for programmers interested in replicating validated program initiatives? It was generally agreed that it is important to keep these target groups distinct since each has differing interests in research findings.

3. Determining the "Appropriate" Level of Research

A third issue revolved around the definition of "evaluation research". For whom it is intended, and what degree of sophistication is required to produce reliable findings of change due to the program intervention?

Discussion revolved around the recognition by both researchers and programmers of the large part unexpected variables and unintended consequences play in the field work of any sort. Suggestions were made regarding "evaluation research", and these included degrees of sophisticated research from "messing around" (keeping process notes and retrospective program reviews) to log keeping, including program journals, observer surveys, participant interviews, etc. to quasi-experimental evaluations, and finally to full-blown experimental designs.

4. Data Collection: Assessing Needs

A fourth area of discussion focussed on what data to collect. Recognizing the field as still relatively new, it was acknowledged that data bases were nonexistent or inadequate in many cases and that data collection could be profitably focussed on several areas:

- Sales volumes (local, state, national)
- Alcohol purchase and other drinking practices
- Relationships between marketing strategies and subsequent purchase of (types of) alcohol beverages

A participant suggested that the alcohol research field could not be made "more mature", but would rather become mature once more data was available and could be developed into test theories. In part because of an inadequate data base, many discussants thought that clear cause-effect

links were not usually possible. The example of the potential sales of alcohol in gas stations in some U.S. states was cited: how do these sales differ from alcohol sales in convenience stores? Right now we can only speculate on the differences because we have no data base; but we need surveys done on the extent to which impulse purchases of alcohol are involved in gas stations or convenience outlets. Corollary questions include a measure of people's perceptions on sales in the different locations; of differential sales volumes, if any; and of experiences between purchasing behaviour and consumption behaviour based on each site.

5. Barriers to Linking Research and Program Development

A final subject of discussion related to identifying some of the administrative or structural constraints to linking research and program interventions. Several of the discussants noted that their organizations did not have mechanisms between researchers and programmers for routine discussion of program research priorities and relevant issues for both evaluators and community programmers. In part, this may exist because funding bases are slightly different and therefore priorities differ.

An addendum:

In the discussion of the five points noted above, questions were raised regarding the difference between health promotion and health education and the value of health education in actually changing knowledge, attitudes and behaviours.

Discussants generally viewed health education as a major but imperfect strategy for changing attitudes or behaviours. It has, according to the evidence of studies so far, the effect of increasing awareness which may or may not lead to behavioural change. Discussants, whether researchers or programmers, generally believe in the importance of legislating structural changes to enforce awareness. But there was strong recommendation that more research was needed, particularly in alcohol problem prevention, to establish the effects of structural change for reducing such problems. One discussant pointed out an example of research that was done in three American cities with young (12-17 year old) pregnant women who stated that they knew of the health risks associated with smoking and alcohol use but continued to smoke and drink. The results showed that the environment (considerable isolation of the individuals in their homes during the day, during the period of pregnancy) contributed to negating the intent to change behaviour (not use alcohol or tobacco).

One discussant introduced some concepts of symbolic actions as a significant environmental factor in changing attitudes and behaviours. He postulated that nutrient contents on beer or other liquor labels would serve as an environmental stimulant, implicitly communicating the message that alcohol is a food with nutritional attributes in the same way as any other packaged food. As such, he presumed that such labelling of beverage alcohol would contribute to the public's consciousness of the relative merits of alcohol consumption.

There was discussion of the relative merits of major policy changes versus incremental local changes in dealing with alcohol problem prevention. The best hope of reducing problems lies at neighbourhood levels where desirable changes can be supported by citizens who are affected by particular alcohol problems and can understand and agree with the proposed changes. Again, discussants ratified the concept of incremental changes appropriate to local communities which would have the cumulative effect of raising public awareness of problems and their solutions.

APPENDICES

LIST OF MATERIALS CIRCULATED TO PARTICIPANTS OF THE SYMPOSIUM

C.A.P.E. Program, Appropriactivity: An undergraduate's guide to conviviality. Educational materials. Addiction Research Foundation, Toronto.

Cox, A., "Public Health Promotion Strategies". Working paper prepared for City of Toronto Department of Public Health, Health Promotion and Advocacy Section, 1984

Hart, D.G., Simpson, R.I., and Gliksman, L., "Campus alcohol policies and education for low risk drinking (C.A.P.E. Program). Addiction Research Foundation, London, 1985

Holder, H.D., and Blose, J.O., Reduction of community alcohol problems: A community simulation for Wake County, North Carolina, Washington County, Vermont, and Alameda County, California. Chapel Hill, North Carolina: The Human Ecology Institute

Holder, H.D., and Hallam, J.R. (Eds.), Control Issues in Alcohol Abuse Prevention: Local, State and National Designs for the '80s. Columbia, SC: South Carolina Commission on Alcohol and Drug Abuse, 1984

Murray, G.G., and Douglas, R.R., "Social marketing in the alcohol policy arena: Some considerations for practitioners". Revised version of paper presented at 30th International Institute on the Prevention and Treatment of Alcoholism, Athens, June 2, 1984.

Murray, G., Thomson, M., and Douglas, R.A., "Municipal government intervention in alcohol policy: A working model". Recreation Research Review, 11(1), 1984, 28-34.

Newton, J., "Ontario community tackles public drinking". Addiction Research Foundation: The Journal, July 1, 1984, p. 16

Reynolds, R.I.," Altering the drinking environment at the county level". In: D. Gerstein (Ed.), Toward the prevention of alcohol problems. Washington, D.C.: National Academy Press, 1984

Reynolds, R.I., and Wynne, J.D., "Alcohol problems: Public officials and public policies - opportunities for influence". In: H. Holder (Ed.), Control issues in alcohol abuse prevention: Strategies for states and communities. Greenwich, Connecticut: JAI Press, Inc. (in press)

Room, R., "Concepts and strategies in the prevention of alcohol-related problems". Contemporary Drug Problems, Spring, 1980, 9-47.

Rootman, I. et al, Alcohol in Canada. Ottawa: Health and Welfare Canada, 1984

Single, E., "International perspectives on alcohol as a public health issue". Journal of Public Health Policy, 5(2), 1984, p. 238-256.

Stevens Lavigne, A., Albert, W., and Simmons, M., "The application of market segmentation in alcohol and drug education: The APPLAUSE project". Regional Programs Division, Addiction Research Foundation, Toronto (unpublished paper).

Thomson, M., Moffatt, K., Douglas, R.R., Murray, G.G, and Gliksman, L., "Implementing a policy to manage alcohol in municipal recreational facilities: Influencing participants to play by the rules", Recreation Canada, 43(3), 1985, p. 42-46

Thomson, M., and Douglas, R., "A peak into the black box: A Policy Development Model for the Resolution of Social and Health Issues in Municipal Recreation". Recreation Research Review, 10(1), 1983, p. 29-34

Thomson, M., Douglas, R., Murray, G., and Moffatt, K., "A Recreation Practitioner's Role in the Development of a Municipal Alcohol Policy". Municipal World, September, 1984, p. 227-229, 250.

Wallack, K., "A Community Approach to the Prevention of Alcohol Related Problems: The San Francisco Experience". International Quarterly of Community Health Education, 5(2), 1985, p. 85-102.

Wittman, F.D., "Community Perspectives on the Prevention of Alcohol Problems. In: A.M. Mecca (Ed.), Comprehensive Alcohol and Drug Abuse Prevention Strategies, California Health Research Foundation publication, p. 13-21

LIST OF PARTICIPANTS

Jim Anderson, M.S.W.
Alcohol Programs Officer
Alcohol, Drugs and Hypertension Unit
Health Promotion Directorate
Health and Welfare Canada
Room 442, Jeanne Mance Building
Tunney's Pasture
Ottawa, Ontario
K1A 1B4

Gerry Conroy
Projects Coordinator
Drinking and Driving Counter-Measures
Ministry of the Attorney-General
10 King Street East
8th Floor
Toronto, Ontario

Ann E. Cox, M.S.W.
Centre Director
West/Central Metro Centre
Addiction Research Foundation
175 College Street
Toronto, Ontario
M5T 1P8

Robert Denniston, M.A.
Director
Division of Prevention and Research Dissemination
National Institute on Alcoholism and Alcohol Abuse
5600 Fishers Lane
Rockville, Maryland
20857

Ron Douglas, M.A.
Regional Consultant
Northern Regional Office
Addiction Research Foundation
144 Pine Street
Suite 203
Sudbury, Ontario
P3C 1X3

Honey Fisher, M.A.
A.R.A. Consultants
102 Bloor Street West
7th Floor
Toronto, Ontario
M5S 1M8

Norman Giesbrecht, Ph.D.
Research Scientist
Alcohol Policy Research
Addiction Research Foundation
33 Russell Street
Toronto, Ontario
M5S 2S1

Louis Gliksman, Ph.D.
Research Scientist
Addiction Research Foundation
Community Programs Evaluation Centre
c/o University of Western Ontario
London, Ontario
N6A 5B9

Judith Groeneveld, M.A.
Research Associate
Occupational Research
Addiction Research Foundation
33 Russell Street
Toronto, Ontario
M5S 2S1

David Hart, M.S.W.
Community Consultant
London Centre
Addiction Research Foundation
414 Dufferin Avenue
London, Ontario
N6B 1Z6

Larry Hershfield, M.Sc.
Regional Director
Metro Toronto Region
Addiction Research Foundation
175 College Street
Toronto, Ontario
M5T 1P8

Harold D. Holder, Ph.D.
Director
Prevention Research Center
2532 Durant Avenue
Berkeley, California
94204

Andrea Stevens Lavigne, M.B.A.
Regional Consultant
Metro Toronto Region
Addiction Research Foundation
175 College Street
Toronto, Ontario
M5T 1P8

Marc Lennox, LL.B.
School of Business
Administration
University of Western Ontario
London, Ontario
N6A 3K7

John McCready, Ph.D.
Regional Director
Western Ontario Region
Addiction Research Foundation
75 James Street South
Hamilton, Ontario
L8P 2Y9

Glen Murray, M.A.
Regional Director
Northern Regional Office
Addiction Research Foundation
144 Pine Street, Suite 203
Sudbury, Ontario
P3C 1X3

Paula Pranovi, M.A.
Coordinator/Researcher
Children's Services Council
Suite 504
76 University Avenue
Windsor-Essex, Ontario

Robert I. Reynolds, M.A.
Chief
Alcohol Program
Department of Health Services
County of San Diego
3851 Rosecrans Street
San Diego, California
92110

Robert Simpson, M.A.
Executive Director
Wellington-Dufferin District
Health Council
317 Speyale Avenue East
Guelph, Ontario
N1E 1H3

Eric Single, Ph.D.
Research Scientist
Alcohol Policy Research
Addiction Research Foundation
33 Russell Street
Toronto, Ontario
M5S 2S1

Connie Weisner, M.S.W.
Research Scientist
Alcohol Research Group
1816 Scenic Avenue
Berkeley, California
94709

Friedner Wittman, M. Arch.,
Ph.D.
Program Director
Prevention Research Centre
2532 Durant Avenue
Berkeley, California
94704